

**Mortality from
Cardiovascular and
Non-cardiovascular
Diseases for
U.S. Cities**

1949-1950
1959-1961
1969-1971

With Selected
Environmental
Descriptors

U.S. DEPARTMENT OF HEALTH,
EDUCATION, AND WELFARE
Public Health Service
National Institutes of Health

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Non-cardiovascular
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EDUCATION, AND WELFARE
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20014

407.3
N277
1979

NAME	ADDRESS	CITY	STATE	ZIP	DATE	REMARKS
JOHN J. JONES	1000 10th Ave	Albany	NY	12208	10/10/79	1000 10th Ave
JOHN J. JONES	1000 10th Ave	Albany	NY	12208	10/10/79	1000 10th Ave
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Introduction to City Data Resource

Statistical studies of the relationship of environmental factors to the health of a population are subject to a variety of problems. One major difficulty is the matching of boundaries of a population at risk with boundaries of a well defined homogeneous environment for the characteristic of interest. States, SMSA's and even counties are often too heterogeneous to be described by a single number for many environmental characteristics. Cities offer the advantage of smaller boundaries which generally coincide with homogeneous administrative areas. For example, water supplies are often administered on a municipal basis. These advantages were the motivation for creation of a data resource of large cities in the United States which is herein described.

This publication offers mortality and demographic information on 480 cities in the United States which had a total population over 25,000 in the 1950 census. Four additional cities had populations greater than 25,000 in 1950 but are excluded here because of incomplete mortality data. Those four cities include East Bakersfield, CA, Kannapolis, NC, and Oak Ridge, TN, which were unincorporated, and Odessa, TX, which was so small in 1940 that 1949 mortality data were unavailable.

Tables for each city may be divided into two subject areas: the first presents population data and mortality data while the second presents derived measures of mortality as well as several descriptive characteristics of the city.

Population data were gathered by the Bureau of the Census in 1950, 1960 and 1970. The data are displayed by age, race and sex groups within each census year. Five-year age

groups were used with the exception of the 75-84 year group as reported in the 1950 census, and the youngest and oldest age groups, which are presented as normally reported. Mortality data were gathered from "Vital Statistics of the U.S." for the pericensual years. Data for cities were not published for 1951; therefore, summary information labeled 1950 is on the basis of two years' data instead of three years' as was done for 1960 and 1970. Mortality data were collected for four categories of cause of death: cardiovascular-renal, diseases of the heart, cancer, and all causes. A fifth category, non-cardiovascular-renal, was calculated from the above.

Deaths occurring during the 1949-50, 1959-61 and 1969-71 periods were classified according to three Revisions of the International Classification of Diseases (ICD)—the Sixth, Seventh and Eighth Revisions, respectively. Changes in definitions of the categories of disease as well as in the inclusion of specific categories of disease in the "34 selected causes by place" published by the National Center for Health Statistics resulted in breaks in the continuity of the mortality statistics from one revision to the next. Detailed descriptions of the specific causes of death described in this publication can be seen in Tables 1-3 which present the ICD codes we titled cardiovascular-renal disease, diseases of the heart, and cancer, respectively.

As Table 1 indicates, "Major Cardiovascular-Renal Disease" categories for the 1949-50 and 1959-61 periods were closely

comparable. However, the category used for presenting deaths by geographic area in the Vital Statistics volumes for 1969-71 was "Major Cardiovascular Diseases", which excludes renal diseases. In order to improve comparability with earlier periods, we added ICD categories 580-584, which was the only suitable grouping available for geographic areas. Unfortunately, acute nephritis and nephrotic syndrome is part of this group, though it was not included in the grouping used in the two earlier census periods. There were 1,354 deaths due to acute nephritis and nephrotic syndrome in the U.S. in 1970. Inclusion of this group makes our 1969-71 mortality approximately 0.1% too high in comparison with the 1949-50 and 1959-61 period. An error in the opposite direction of approximately 1.7% was created by our exclusion from the 1969-71 data of "Diseases of the Veins, Lymphatics, and Other Diseases of the Circulatory System", of which pulmonary embolism is the most important cause of death. The net result of these changes is that the mortality shown for 1969-71 is approximately 1.6% too low, so that the real decline in cardiovascular-renal mortality is not quite as great as our data indicate.

Diseases of the heart are comparable for the three periods except for the 1949-50 period which excluded deaths from rheumatic fever and chorea. As can be seen in Table 2, comparability ratios, based on total population, are within one percent even with this exclusion.

Deaths from cancer, while assigned different ICD codes from Seventh to the Eighth Revisions, were similarly defined for all three Revisions. Comparability ratios, as seen in Table 3, remain close to one.

Population and mortality data were sent to the Director of Vital Statistics of each state for verification. Discrepancies were minor except in seven cities. For these seven cities (Wilmington, DE; Atlanta, GA; Hempstead and Poughkeepsie, NY; Alexandria, VA; Cambridge, MA; and West Orange, NJ), the state data for total mortality appeared more likely to be correct than the national data. Therefore, state total mortality data are presented in the tables, but data for specific causes are excluded because of the possibility of differences among states in classification of causes.

The second part of the tables contains summary mortality information for each cause of death and each census period as well as a list of characteristics of the city which were of interest to NHLBI at the time the project was initiated.

Expected deaths for each cause were calculated using the age, race and sex specific rates experienced in 1960 by the entire United States. The mortality rates for all causes, cardiovascular-renal disease, diseases of the heart, and cancer are presented in Tables 4-7 respectively. Modification was made to accommodate the 75-84 year age group in the 1950 period. Observed deaths were then divided by the expected deaths for the total population to provide mortality ratios for each census period and each cause of death. Direct adjustment could not be made because counts of deaths were not available for cities by age, race and sex.

City characteristics were taken from a variety of sources. Most data were obtained from publications produced by the appropriate Govern-

ment agencies. Overlapping responsibility of agencies provided more than one source for some of the data.

The 1950 rank (based on 1950 population and ranging from 1 to 484), population per square mile and median family income were all taken from available census data. In addition, the urban class recorded for each city is that given it by the 1950 census. According to census definitions, a city is either central within an urbanized area, incorporated within the fringe of an urbanized area, or independent. Of the 480 cities included, 172 are central cities, 119 are fringe cities and 189 are independent. Urban area rank is based on the total population of the unincorporated areas as well as the central and fringe cities making up the urban area. Finally, mean long-term January temperature, July temperature and annual precipitation were also obtained from the *County and City Data Book, 1956*.

Land resource region was taken from Agriculture Handbook 296, most recently revised in 1972. Land resource regions consist of areas which have been found similar in land use, water resources, climate, soil characteristics and topography. The map on the opposite page shows the land resource regions by code. Agriculture Handbook 296 should be consulted for detailed descriptions of the regions.

Data on water source, total hardness and non-carbonate hardness were available for major supplies of drinking water for all 480 study cities in U.S. Geological Survey Water Supply Papers 1299-1300, published in 1952.

If all suppliers to a city received water exclusively from surface sources or, if all were from wells, the source is listed as "surface" or "ground", respectively. The source is listed as "both" if at least one supplier to the city had each type of source. Data on hardness and non-carbonate hardness is reported as CaCO₃ equivalent. It represents a weighted average of reported supplies to a city with weights based on the population served, or, if that information was not available, on water treatment facility capacity.

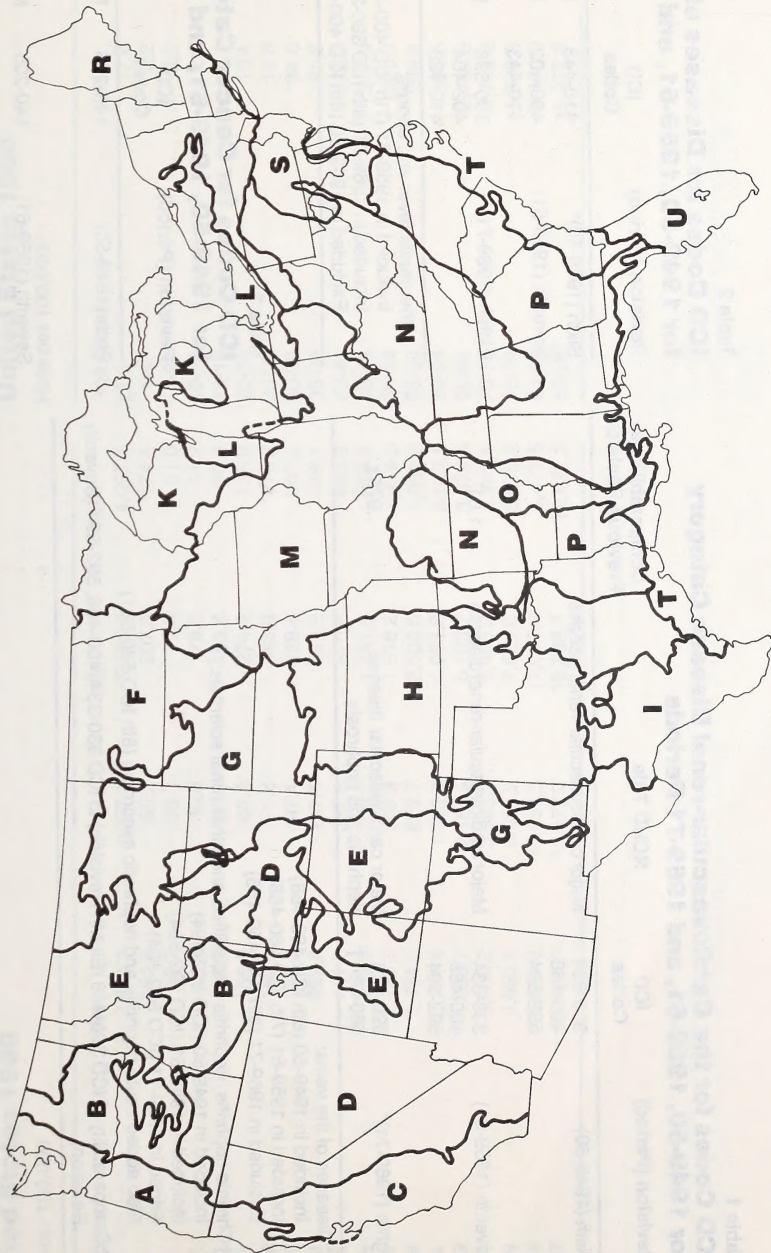
Determination of fluoridation status required information on the date of fluoridation by each supplier of water within a city, amount of population served and the natural fluoride content. Cities were classified according to information from periodic censuses of water suppliers conducted by the Division of Dental Health, Bureau of Health Professions Education and Manpower Training, National Institutes of Health (*Fluoridation Census 1969*, unpublished lists of fluoridation discontinuations, and *Natural Fluoride Content of Community Water Supplies 1969*). Confirmation and data on completeness of population coverage were obtained from 1954 and 1964 publications of the U.S. Geological Survey (Water-Supply Papers 1299-1300 and 1812) and the U.S. Public Health Service (1963 inventory, Municipal Water Facilities). Discrepancies were resolved by contacting local water authorities. A city was classified to be "fluoridated" if 90% of the water supplied was artificially fluoridated. Of 480 cities, 265 fluoridated before 1969 while 215 cities had not fluoridated. Of the 265 which had fluoridated, 34 were classified as uncertain (27

discontinued fluoridation before 1969, 4 fluoridated less than 90% and 3 had optimum or high natural fluoride water before changing supplies and fluoridating). Non-fluoridated cities were classified as having low natural fluoride content (189 cities) if they had less than 0.7 ppm and having optimal (23 cities) or high (3 cities) fluoride content if they had 0.7 ppm to 1.2 ppm or more than 1.2 ppm respectively.

A second section of tables has been included following the tables for 480 cities. This section presents lists of 480 cities ranked by each of the quantitative characteristics described above as well as the mortality ratios for each decade and cause of death. For the lists of mortality ratios for causes other than all causes the number of cities is reduced to 473 reflecting the absence of the seven cities for which mortality statistics for individual causes were unreliable. The first page of section two provides a table of contents for the lists that are included.

This data resource was developed at NHLBI to examine the relationship of mortality rates of cities to characteristics of city water supplies. It is offered here as a research tool for those interested in the data described or for those for whom a city data base is most appropriate but additional city characteristics would be of greater interest.

Land Resource Regions and Major Land Resource Areas of the United States (exclusive of Alaska and Hawaii)



- A** Northwestern Forest, Forage, and Specialty Crop Region
- B** Northwestern Wheat and Range Region
- C** California Subtropical Fruit, Truck, and Specialty Crop Region
- D** Western Range and Irrigated Region
- E** Rocky Mountain Range and Forest Region
- F** Northern Great Plains Spring Wheat Region
- G** Western Great Plains Range and Irrigated Region
- H** Central Great Plains Winter Wheat and Range Region
- I** Southwestern Plateaus and Plains Range and Cotton Region
- J** Southwestern Prairies Cotton and Forage Region
- K** Northern Lake States Forest and Forage Region
- L** Lake States Fruit, Truck, and Dairy Region
- M** Central Feed Grains and Livestock Region
- N** East and Central General Farming and Forest Region
- O** Mississippi Delta Cotton and Feed Grains Region
- P** South Atlantic and Gulf Slope Cash Crop, Forest, and Livestock Region
- R** Northeastern Forage and Forest Region
- S** Northern Atlantic Slope Truck, Fruit and Poultry Region
- T** Atlantic and Gulf Coast Lowland Forest and Truck Crop Region
- U** Florida Subtropical Fruit, Truck Crop, and Range Region

Source: U.S. Department of Agriculture Handbook 296

Table 1

**ICD Codes for the Cardiovascular-renal Disease Category
for 1949-50, 1959-61, and 1969-71 Periods**

Revision (Period)	ICD Codes	NCHD Title	Comparability to Previous Revision
Sixth (1949-50)	330-334 400-468 592-594	Major cardiovascular-renal disease	
Seventh (1959-61)	330-334 400-468 592-594	Major cardiovascular-renal disease	1.01
Eighth (1969-71)*	390-448 580-584 †	Major cardiovascular disease Nephritis and nephrosis	.975‡

*Diseases of the veins:

Included in 1949-50 (6th ICD 460-468)

Included in 1959-61 (7th ICD 460-468)

Excluded in 1969-71 (8th ICD 450-458)

†Chronic nephritis, nephritis unqualified and other renal sclerosis:

Included in 1949-50 (ICD 592-594)

Included in 1959-61 (ICD 592-594)

Added in 1969-71 (ICD 582-584)

Also added acute nephritis and nephrotic syndrome (8th ICD 580-581)

‡Comparability of ICD 390-448 (Eighth Revision) to ICD 330-334, 400-468, 592-594 (Seventh Revision)

Table 2

**ICD Codes for Diseases of the Heart Category
for 1949-50, 1959-61, and 1969-71 Periods**

Revision (Period)	ICD Codes	NCHS Title	Comparability to Previous Revision
Sixth (1949-50)*	410-443	Diseases of the heart	
Seventh (1959-61)	400-402 410-443	Diseases of the heart	1.00
Eighth (1969-71)	390-398 402-404 410-429	Diseases of the heart	1.00

*Rheumatic fever and chorea:

Included in 1959-61 (7th ICD 400-402)

Included in 1969-71 (8th ICD 390-392)

Excluded in 1949-50 (6th ICD 400-402)

Table 3

**ICD Codes for Cancer Category
for 1949-50, 1959-61, and 1969-71 Periods**

Revision (Period)	ICD Codes	NCHS Title	Comparability to Previous Revision
Sixth (1949-50)	140-205	Malignant neoplasms including lymphatic and hematopoietic tissues	
Seventh (1959-61)	140-205	Malignant neoplasms including lymphatic and hematopoietic tissues	.99
Eighth (1969-71)	140-209	Malignant neoplasms including lymphatic and hematopoietic tissues	.99

Table 4

Mortality Rates for all Causes by Age, Race and Sex United States 1960

Rate per 100,000

Age Group	WM	WF	NM	NF
LT 1	2,694.1	2,007.7	5,189.4	4,067.1
1-4	104.9	85.2	207.3	174.4
5-9	53.7	38.3	72.3	61.0
10-14	51.6	30.8	78.8	44.2
15-19	125.2	50.3	165.8	80.4
20-24	166.9	60.4	274.9	135.8
25-29	152.1	71.6	343.0	210.2
30-34	173.2	97.1	428.6	307.8
35-39	253.4	147.5	599.2	448.1
40-44	417.0	237.9	876.5	660.8
45-49	709.3	368.5	1,241.5	919.4
50-54	1,183.3	560.3	1,916.2	1,419.5
55-59	1,784.6	829.7	2,500.5	1,951.8
60-64	2,751.4	1,362.2	4,053.8	3,019.5
65-69	4,050.7	2,154.9	5,103.7	3,474.4
70-74	5,909.2	3,583.2	6,493.2	4,742.5
75-79	8,698.7	6,084.2	7,628.0	5,879.2
80-84	13,544.3	10,654.3	11,017.4	8,477.5
85-UP	21,750.0	19,477.7	15,238.7	12,871.2

Table 5

Mortality Rates for CV-Renal Diseases by Age, Race and Sex United States 1960

Rate per 100,000

Age Group	WM	WF	NM	NF
LT 1	12.8	7.7	24.8	21.1
1-4	2.2	1.6	6.8	4.9
5-9	2.2	1.5	3.9	4.0
10-14	2.8	2.7	6.1	6.7
15-19	6.1	4.7	12.8	11.7
20-24	10.4	8.6	21.4	24.0
25-29	16.3	12.5	44.8	46.7
30-34	34.6	17.8	86.1	82.9
35-39	81.6	30.3	174.3	151.6
40-44	178.3	61.3	331.8	275.2
45-49	347.9	109.0	546.1	436.1
50-54	625.6	198.0	923.3	738.3
55-59	989.8	357.0	1,338.3	1,138.7
60-64	1,590.5	706.2	2,293.9	1,889.0
65-69	2,444.3	1,261.5	2,998.1	2,281.3
70-74	3,734.3	2,330.9	3,996.6	3,281.3
75-79	5,820.0	4,277.1	4,813.6	4,094.7
80-84	9,480.0	7,903.0	7,295.4	6,168.3
85-UP	15,977.8	14,998.9	10,356.8	9,330.6

Table 6

Mortality Rates for Diseases of the Heart by Age, Race and Sex United States 1960

Rate per 100,000

Age Group	WM	WF	NM	NF
LT 1	6.9	4.3	13.1	11.7
1-4	1.0	0.9	3.8	2.8
5-9	1.0	0.6	2.2	2.7
10-14	1.2	1.3	4.1	3.2
15-19	2.8	1.8	7.8	6.4
20-24	4.7	4.1	9.9	13.2
25-29	9.5	6.2	26.2	23.1
30-34	24.9	10.0	53.7	43.8
35-39	66.0	18.5	112.5	83.2
40-44	151.7	39.4	211.3	158.2
45-49	300.4	72.7	365.6	257.9
50-54	540.4	137.9	631.0	455.1
55-59	842.0	263.4	912.1	712.6
60-64	1,311.6	518.9	1,540.7	1,170.6
65-69	1,928.7	914.7	1,983.3	1,393.3
70-74	2,788.8	1,635.6	2,562.5	2,006.4
75-79	4,099.6	2,848.9	3,098.6	2,507.5
80-84	6,340.5	5,062.0	4,489.1	3,730.2
85-UP	10,135.8	9,280.8	6,128.6	5,564.1

Table 7

Mortality Rates for Cancer by Age, Race and Sex United States 1960

Rate per 100,000

Age Group	WM	WF	NM	NF
LT 1	7.9	6.8	6.5	6.5
1-4	13.1	9.7	8.2	7.0
5-9	9.1	6.5	5.2	4.7
10-14	6.8	5.8	4.5	4.9
15-19	9.7	6.0	9.4	4.3
20-24	11.1	7.0	8.9	9.5
25-29	16.4	12.7	14.7	17.1
30-34	21.1	24.2	21.7	41.5
35-39	33.8	47.9	47.3	72.1
40-44	59.7	86.7	99.3	128.4
45-49	114.5	143.8	169.9	207.1
50-54	219.9	211.6	308.8	300.7
55-59	360.1	281.7	433.7	369.6
60-64	559.3	382.6	710.6	505.4
65-69	780.0	500.3	864.1	498.3
70-74	1,029.9	641.6	1,021.2	596.6
75-79	1,297.9	847.8	1,038.0	676.6
80-84	1,648.4	1,107.2	1,195.5	757.2
85-UP	1,791.4	1,304.9	1,211.7	727.5

Section I

Table of Contents

Alabama	1	Iowa	138	Nevada	253	South Dakota	406
Arizona	8	Kansas	151	New Hampshire	254	Tennessee	408
Arkansas	10	Kentucky	156	New Jersey	257	Texas	414
California	15	Louisiana	163	New Mexico	285	Utah	434
Colorado	50	Maine	170	New York	288	Vermont	437
Connecticut	53	Maryland	173	North Carolina	316	Virginia	438
Delaware	65	Massachusetts	176	North Dakota	326	Washington	448
District of Columbia	66	Michigan	206	Ohio	328	West Virginia	456
Florida	67	Minnesota	226	Oklahoma	361	Wisconsin	463
Georgia	82	Mississippi	232	Oregon	367	Wyoming	480
Idaho	91	Missouri	239	Pennsylvania	370		
Illinois	93	Montana	248	Rhode Island	396		
Indiana	119	Nebraska	251	South Carolina	402		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	NF
TOTAL	10278	11321	4495	4972	10509	11715	5410	6023	5961	6023	9536	11060	5001	5936	5936	5936	5936	5936
GRAND TOTAL																		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBSERVED	EXPECTED*
TOTAL	625.0	1107.0	1.401	1.209	1353.0	1080.1
CV-RENAL	280.0	508.0	1.323	1.080	739.0	603.9
HEART	183.0	317.0	1.716	0.583	496.0	1.224
NON CV-R	345.0	599.0	1.716	0.583	614.0	1.289
CANCER	72.0	159.0	1.081	1.183	188.0	1.162

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS						CODE					
	1949	1950	1959	1960	1961	59-61 SUM	1969	1970	1971	SUM	69-71 SUM	STATE	ALABAMA	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME
TOTAL	309	316	366	377	364	1107	477	436	440	1353	1353	386	386	3340	3340	2574	6931	INDEPENDENT
CV-RENAL	122	158	169	148	191	508	271	230	238	739	739	1959	1959	1959	1959	1959	1959	INDEPENDENT
HEART	186	97	108	90	119	317	189	155	152	496	496	1959	1959	1959	1959	1959	1959	INDEPENDENT
NON CV-R	187	158	197	229	173	599	206	206	202	614	614	1959	1959	1959	1959	1959	1959	INDEPENDENT
CANCER	42	30	51	51	57	159	67	58	63	188	188	1959	1959	1959	1959	1959	1959	INDEPENDENT

FLUORIDATED IN 1960

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	128	142	219	236	143	121	261	292	125	121	174	162
1-4	486	452	853	913	544	535	1083	1087	494	456	689	715
5-9	482	467	856	896	593	610	1312	1312	685	663	964	1048
10-14	367	401	757	732	653	659	1038	1130	708	660	1158	1171
15-19	314	412	624	732	525	642	718	791	670	672	1029	1120
20-24	494	567	627	768	407	484	411	539	526	562	466	654
25-29	540	551	536	627	369	417	394	588	471	533	338	405
30-34	486	498	523	672	435	473	462	573	423	424	232	376
35-39	428	411	645	841	483	548	438	597	381	392	246	434
40-44	389	381	564	644	483	546	446	613	473	515	360	511
45-49	345	347	557	555	476	490	478	590	513	586	339	529
50-54	259	281	434	387	424	439	449	504	507	571	363	460
55-59	208	252	293	333	330	376	404	425	441	525	373	463
60-64	194	184	200	201	236	308	302	350	378	493	344	450
65-69	133	172	236	238	206	280	263	334	282	417	351	395
70-74	93	110	93	126	151	211	190	201	204	334	219	294
75-79#	69	101	75	115	110	146	102	128	121	222	115	193
80-84#	0	0	0	0	46	88	40	69	76	154	73	144
85-UP	13	13	16	30	27	49	32	45	43	115	51	94
TOTALS	5428	5742	8108	9167	6641	7422	8823	10168	7521	8415	7884	9608
GRAND TOTAL				28445				33094				33428

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED EXPECTED* OBS/EXP	674.0 483.0 1.395	1147.0 1013.5 1.132
CV-RENAL	OBSERVED EXPECTED* OBS/EXP	307.0 224.4 1.368	599.0 515.3 1.162
HEART	OBSERVED EXPECTED* OBS/EXP	187.0 169.1 1.255	392.0 343.0 1.143
NON CV-R	OBSERVED EXPECTED* OBS/EXP	367.0 258.6 1.419	548.0 498.1 1.100
CANCER	OBSERVED EXPECTED* OBS/EXP	67.0 65.9 1.017	190.0 177.1 1.553

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970		1971	69-71 SUM	STATE
1949	336	674	343	427	377	1467	562	583	576	1721	1950 RANK BY POPULATION	429
CAUSE	153	307	188	216	195	599	262	259	260	781	1950 POP./SQ. MILE	5689
TOTAL	95	187	116	141	135	392	159	155	147	461	1970 POP./SQ. MILE	2321
V-RENAL	182	367	155	211	182	548	300	324	316	940	1949 MED. FAM. INCOME	2304
HEART	34	67	54	68	68	190	83	89	103	275	1969 MED. FAM. INCOME	6548
NON CV-R											URBAN CLASS	PRINCE
CANCER											1950 URBAN AREA RANK	30
											JAN MEAN TEMPERATURE	45
											JULY MEAN TEMPERATURE	79
											MEAN ANN. PRECIPITATION	53
											LAND RESOURCE REGION	N
											WATER SOURCE	
											TOTAL HARDNESS	GROUND AND SURFACE
											NON-CARBONATE HARDNESS	59 PPM
											FLUORIDATION STATUS	11 PPM
											NO ARTIFICIAL LOW NATURAL	NO ARTIFICIAL LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WP	NM	NP	WM	WP	NM	NP
IT 1	2110	2026	1691	1625	2162	2047	1792	1860
5-4	7933	7740	6511	6372	8413	7183	7155	7183
5-9	7438	7259	6395	6393	9461	9171	8100	8411
10-14	6159	5936	5164	5242	8547	8329	7384	7143
15-19	5618	5636	4639	5268	6286	7588	5963	5399
20-24	7772	10233	4343	6921	5987	8114	3539	4374
25-29	9598	9938	4497	5839	6806	7182	3326	4218
30-34	7993	8418	3993	5214	7186	7781	3389	4625
35-39	7199	8069	4573	6159	7229	7788	3466	4580
40-44	6641	7444	4269	5045	6611	7233	3479	4330
45-49	5934	6544	4127	4852	6081	6872	3670	4366
50-54	5178	5618	3530	3606	5400	6296	3249	3855
55-59	4318	4870	2278	2334	4825	5876	3118	3524
60-64	3427	3985	1588	1662	3881	4935	2288	2816
65-69	2703	3318	1471	1847	3050	4256	1955	2376
70-74	1724	2231	696	883	2267	3410	1170	1508
75-79*	1342	2088	623	752	1417	2212	707	933
80-84*	0	0	0	0	688	1160	242	381
85-UP	170	312	104	189	349	696	166	324
TOTALS	93257	102665	60492	69623	96646	108974	63258	72009
GRAND TOTAL				326037				340887

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	1959	1960	49-50		59-61		69-71
					SUM		SUM		
TOTAL	3167	3047	3537	3798	3502	10837	4499	4250	13009
CV-RENAL	1513	1453	1935	2049	1895	5879	2052	2033	6131
HEART	1018	972	1292	1332	1195	3809	1197	1181	3585
NON CV-R	1654	1594	1602	1749	1607	4958	2447	2204	6878
CANCER	405	406	497	535	478	1510	751	705	2177

DEATHS AND DEATH RATIOS
BY AGE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*
TOTAL	6214.0	10837.0	1.149	1.068	1.182	
CV-RENAL	2966.0	5879.0	1.126	1.110	0.981	
HEART	1990.0	3809.0	1.101	1.056	0.854	
NON CV-R	3248.0	4958.0	1.170	1.023	1.446	
CANCER	811.0	1510.0	1.008	1.005	1.351	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
ALABAMA	34	4993	3785	2826	7737	CENTRAL	30	45	79	N	N	SURFACE	59 PPM	11 PPM	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	NP	NN	NP	WM	NP	NN	NP	WM	NP	NN	NP
IT 1	999	1017	684	658	1711	1528	1053	1113	1044	924	648	658
1-4	3841	3795	2428	2449	6671	6470	4067	4062	3820	3759	2927	2710
5-9	3598	3570	2317	2318	7556	7298	4405	4537	5821	5753	4437	4204
10-14	2790	2813	1793	1814	6729	6645	3629	3683	6139	5991	4813	4701
15-19	2344	2832	1424	1728	4710	4993	2544	2689	5606	5610	3728	3990
20-24	2715	3810	1565	2259	3662	4531	1748	2800	4636	5434	1990	2553
25-29	3714	4289	1941	2433	4477	4806	1703	2215	4225	4322	1397	1954
30-34	3415	3529	1717	2043	4960	5330	1816	2418	3381	3512	1448	1930
35-39	3228	3636	1835	2201	5275	5654	2013	2381	3160	3470	1377	1958
40-44	3001	3198	1556	1709	4526	4630	1745	2030	3573	3962	1500	2026
45-49	2599	2543	1304	1345	4121	4276	1704	1890	3557	4175	1560	1998
50-54	2090	2166	936	1061	3543	3614	1366	1466	3412	3599	1392	1700
55-59	1733	1808	637	655	2840	2948	1148	1261	2928	3427	1352	1629
60-64	1262	1406	495	491	1998	2349	716	879	2439	3015	1100	1265
65-69	961	1270	432	594	1551	1986	603	806	1860	2424	864	1199
70-74	620	880	227	302	979	1444	412	524	1197	1931	501	727
75-79*	512	902	186	263	615	1009	199	327	742	1394	270	461
80-84*	0	0	0	0	339	581	98	148	364	814	171	257
85-UP	80	138	30	75	149	382	55	140	231	586	138	256
TOTALS	39502	43602	21507	24398	66412	70474	31024	34069	58135	64102	31613	36176
GRAND TOTAL				129009				202779				190026

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL				TOTAL				TOTAL			
CV-RENAL	OBSERVED				2367.0				4953.0			
	EXPECTED*				2010.6				4844.4			
	OBS/EXP				1.177				1.022			
HEART	OBSERVED				1181.0				2700.0			
	EXPECTED*				958.7				2367.4			
	OBS/EXP				1.232				1.140			
NON CV-R	OBSERVED				908.0				2068.0			
	EXPECTED*				660.6				1631.6			
	OBS/EXP				1.223				1.267			
CANCER	OBSERVED				1186.0				2253.0			
	EXPECTED*				1052.0 / 2477.0				2660.0			
	OBS/EXP				1.127				0.910			
CANCER	OBSERVED				303.0				720.0			
	EXPECTED*				291.1				700.3			
	OBS/EXP				1.041				1.028			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR										CITY CHARACTERISTICS										CODE
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE									
TOTAL	1209	1158	2367	1622	1690	1641	4953	1850	1827	1913	5590	1950 RANK BY POPULATION	77	ALABAMA							
CV-RENAL	608	573	1181	883	920	897	2700	953	975	1002	2930	1950 POP/SQ. MILE	5079								
HEART	418	390	808	706	694	668	2068	709	766	736	2211	1970 POP/SQ. MILE	1630								
NON CV-R	601	585	1186	739	770	744	2253	897	852	911	2660	1949 MED. FAM. INCOME	2800								
CANCER	154	149	303	241	221	258	720	313	304	352	969	1969 MED. FAM. INCOME	8095								
												URBAN CLASS	CENTRAL								
												1950 URBAN AREA RANK	67								
												JAN MEAN TEMPERATURE	52								
												JULY MEAN TEMPERATURE	80								
												MEAN ANN. PRECIPITATION	67								
												LAND RESOURCE REGION	T								
												WATER SOURCE	SURFACE								
												TOTAL HARDNESS	20 PPM								
												NON-CARBONATE HARDNESS	10 PPM								
												FLUORIDATION STATUS	FLUORID								

MONTGOMERY
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DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					1960					1970					1949-50		1959-61		1969-71														
	-----					-----					-----					-----					TOTAL		TOTAL											
	WM	WF	NM	NF	NF	WM	WF	NM	NF	NF	WM	WF	NM	NF	NF	WM	WF	NM	NF	NF	WM	WF	NM	NF	NF	WM	WF	NM	NF	NF	WM	WF	NM	NF
IT 1	814	758	499	519		1088	1138	723	729		706	705	493	459		2081.0	3729.0	100	4390.0		1693.8	3442.2	4105.8	1.069		1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953	
1-4	3023	2985	2066	2012		4411	4157	2682	2744		2682	2553	1860	1835		OBSERVED	EXPECTED*				OBS/EXP					OBSERVED	EXPECTED*							
5-9	2627	2509	1681	1968		4586	4572	2832	2904		4074	3572	2358	2567		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
10-14	1802	1831	1618	1748		3977	3971	2398	2407		4505	4349	2839	2886		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
15-19	1683	2204	1590	2256		2585	3017	1743	2139		3605	4090	2357	2602		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
20-24	2665	3252	1619	2510		2705	3356	1457	2020		3023	3655	1626	2100		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
25-29	2990	3641	1925	2531		3251	3335	1286	1633		3023	3655	1626	2100		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
30-34	3049	2986	1274	1820		3202	3390	1097	1611		2499	2722	776	1184		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
35-39	2704	2755	1446	1990		3468	3817	1199	1574		2581	2759	834	1236		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
40-44	2216	2402	1247	1483		2941	2835	1128	1424		2789	3072	879	1395		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
45-49	1740	1923	969	1322		2310	2611	1166	1573		2792	3320	934	1174		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
50-54	1449	1657	852	1190		2026	2277	953	1226		2608	2740	865	1195		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
55-59	1151	1275	591	762		1491	1865	570	1076		2088	2576	875	1150		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
60-64	879	1143	456	624		1125	1590	522	842		1649	2208	706	1003		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
65-69	640	976	474	754		909	1294	564	847		1105	1756	514	1034		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
70-74	422	631	251	392		640	1007	403	662		741	1434	383	673		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
75-79	373	659	236	363		377	759	240	387		395	1065	258	422		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
80-84	0	0	0	0		174	400	100	192		294	679	143	260		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
85-89	43	113	48	103		90	253	60	139		178	478	113	221		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
TOTALS	30270	33700	18708	23847		41356	45605	21323	26109		41420	47188	20018	24760		1693.8	3442.2	4105.8	1.069		1.229	1.083			1063.0	1886.0	2164.0	821.7	1721.3	2271.7	1.096	0.953		
GRAND TOTAL				106255					134393					133866																				
* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED																																		
* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES																																		

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS					CODE
	1949	1950	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	
CAUSE	1949	1950	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	ALABAMA
TOTAL	1023	1058	1252	1268	1209	3729	1562	1352	1776	4390	100
CV-RENAL	532	531	655	636	595	1886	744	795	795	2164	4081
HEART	302	358	407	381	350	1138	443	394	486	1323	2875
NON CV-R	491	527	597	632	614	1843	818	727	681	2226	2658
CANCER	112	120	172	148	169	489	232	209	231	672	8400
											CENTRAL
											113
											49
											JAN MEAN TEMPERATURE
											89
											JULY MEAN TEMPERATURE
											53
											MEAN ANN. PRECIPITATION
											P
											LAND RESOURCE REGION
											GROUND
											WATER SOURCE
											TOTAL HARDNESS
											42 PPM
											NON-CARBONATE HARDNESS
											0 PPM
											FLUORIDATION STATUS
											NO ARTIFICIAL, LOW NATURAL

STATE ALABAMA
1950 RANK BY POPULATION 100
1950 POP/SQ. MILE 4081
1970 POP/SQ. MILE 2875
1949 MED. FAM. INCOME 2658
1969 MED. FAM. INCOME 8460
URBAN CLASS CENTRAL
1950 URBAN AREA RANK 113
JAN MEAN TEMPERATURE 49
JULY MEAN TEMPERATURE 89
MEAN ANN. PRECIPITATION 53
LAND RESOURCE REGION P
WATER SOURCE GROUND
TOTAL HARDNESS 42 PPM
NON-CARBONATE HARDNESS 0 PPM
FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
TOTAL	17316	16707	5666	6707	22221	22242	8667	10240	23931	24383	7883	9576
GRAND TOTAL				46396				63370				65773

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	689.0	1380.0	1626.0		676.2	1899.2	0.819		689.0	1380.0	1626.0	
CV-RENAL	341.0	688.0	835.0		327.1	875.8	1.111		341.0	688.0	835.0	
HEART	237.0	416.0	505.0		227.5	506.1	0.662		237.0	416.0	505.0	
NON CV-R	348.0	592.0	791.0		349.1	808.4	0.901		348.0	592.0	791.0	
CANCER	80.0	151.0	254.0		101.1	249.7	0.605		80.0	151.0	254.0	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CITY CHARACTERISTICS

CODE

CAUSE	1949-50				1959-61				1969-71			
	SUM	1949	1950	1951	SUM	1959	1960	1961	SUM	1969	1970	1971
TOTAL	689	325	364	199	1380	435	482	463	1626	570	552	504
CV-RENAL	341	158	183	99	688	217	230	241	835	281	291	263
HEART	237	110	127	99	416	133	135	148	505	172	180	153
NON CV-R	348	167	181	99	692	218	252	222	791	289	261	241
CANCER	80	43	37	0	151	56	45	50	254	85	90	79

ALABAMA	253
STATE	1950 RANK BY POPULATION
1950 POP/SQ. MILE	4884
1970 POP/SQ. MILE	2400
1949 MED. FAM. INCOME	2333
1969 MED. FAM. INCOME	7839
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	45
JULY MEAN TEMPERATURE	81
MEAN ANN. PRECIPITATION	53
LAND RESOURCE REGION	P
WATER SOURCE	SURFACE
TOTAL HARDNESS	21 PPM
NON-CARBONATE HARDNESS	7 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1951

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970				CAUSE
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	
TOTAL	48206	51991	3287	3334	20301	210508	12586	13065	262272	280238	18725	20327	
5-9	3744	3560	293	321	19308	18486	1631	1653	18707	18037	1783	1848	
10-14	3535	3507	198	218	21372	20548	1332	1347	27437	26472	2666	2542	
15-19	2909	3318	242	278	14181	15105	906	1023	24380	25156	2008	2153	
20-24	2994	3623	242	323	10618	12264	775	963	19281	22877	1311	1741	
25-29	3323	4612	272	301	12149	12867	800	891	18942	19454	1209	1419	
30-34	3620	4276	288	280	13579	14722	728	875	15652	16149	998	1268	
35-39	3993	4632	287	283	15169	16514	676	820	14839	15524	976	1072	
40-44	3897	4193	279	233	14138	14850	655	715	15720	16908	803	1010	
45-49	3482	3622	196	184	12995	13463	657	674	16208	18259	791	927	
50-54	3064	3188	159	165	10673	10952	601	555	14659	15787	688	798	
55-59	2608	2640	164	118	8651	8851	537	454	12270	13874	666	734	
60-64	2223	2237	97	80	6657	7633	361	318	10132	11763	571	571	
65-69	1673	1835	103	82	6381	6793	331	262	7642	9380	517	443	
70-74	1184	1283	61	45	4666	4946	229	170	5697	7630	298	325	
75-79*	997	1146	53	40	2557	2934	149	114	3888	5387	188	208	
80-84*	0	0	0	0	1137	1446	49	45	2068	3173	120	119	
85-UP	140	190	12	11	580	796	35	28	1274	1954	89	129	
TOTALS	48206	51991	3287	3334	20301	210508	12586	13065	262272	280238	18725	20327	
GRAND TOTAL				106818				439170				581562	

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	2823.0	9166.0	18920.0		2823.0	9166.0	18920.0		2823.0	9166.0	18920.0	
CV-FEMAL	1119.0	4330.0	6901.0		1119.0	4330.0	6901.0		1119.0	4330.0	6901.0	
HEART	766.0	3168.0	4955.0		766.0	3168.0	4955.0		766.0	3168.0	4955.0	
NON CV-R	1704.0	4836.0	8019.0		1704.0	4836.0	8019.0		1704.0	4836.0	8019.0	
CANCER	350.0	1442.0	2611.0		350.0	1442.0	2611.0		350.0	1442.0	2611.0	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949				1950				1959				1969				1970				CAUSE
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	
TOTAL	1514	1309	2823	3334	1514	1309	2823	3334	1514	1309	2823	3334	1514	1309	2823	3334	1514	1309	2823	3334	
CV-FEMAL	572	547	1119	1184	572	547	1119	1184	572	547	1119	1184	572	547	1119	1184	572	547	1119	1184	
HEART	377	389	766	766	377	389	766	766	377	389	766	766	377	389	766	766	377	389	766	766	
NON CV-R	942	762	1704	1704	942	762	1704	1704	942	762	1704	1704	942	762	1704	1704	942	762	1704	1704	
CANCER	184	166	350	350	184	166	350	350	184	166	350	350	184	166	350	350	184	166	350	350	

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				1959				1969				1970				CAUSE
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	
TOTAL	1514	1309	2823	3334	1514	1309	2823	3334	1514	1309	2823	3334	1514	1309	2823	3334	1514	1309	2823	3334	
CV-FEMAL	572	547	1119	1184	572	547	1119	1184	572	547	1119	1184	572	547	1119	1184	572	547	1119	1184	
HEART	377	389	766	766	377	389	766	766	377	389	766	766	377	389	766	766	377	389	766	766	
NON CV-R	942	762	1704	1704	942	762	1704	1704	942	762	1704	1704	942	762	1704	1704	942	762	1704	1704	
CANCER	184	166	350	350	184	166	350	350	184	166	350	350	184	166	350	350	184	166	350	350	

CITY CHARACTERISTICS

STATE	ARIZONA			
	1950 POP/SQ. MILE	1960 POP/SQ. MILE	1970 POP/SQ. MILE	1980 POP/SQ. MILE
1950 RANK BY POPULATION	98	98	98	98
1950 POP/SQ. MILE	6247	6247	6247	6247
1960 POP/SQ. MILE	2346	2346	2346	2346
1970 POP/SQ. MILE	3195	3195	3195	3195
1980 POP/SQ. MILE	9956	9956	9956	9956
1950 MED. FAM. INCOME	58	58	58	58
1960 MED. FAM. INCOME	58	58	58	58
1970 MED. FAM. INCOME	58	58	58	58
1980 MED. FAM. INCOME	58	58	58	58
1950 URBAN AREA RANK	58	58	58	58
JAN MEAN TEMPERATURE	49	49	49	49
JULY MEAN TEMPERATURE	90	90	90	90
MEAN ANN. PRECIPITATION	7	7	7	7
LAND RESOURCE REGION	D	D	D	D
WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE
TOTAL HARDNESS	244 PPM	244 PPM	244 PPM	244 PPM
NON-CARBONATE HARDNESS	62 PPM	62 PPM	62 PPM	62 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NH	NF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
IT 1	407	375	26	34	152	145	2587	2463	152	145	2259	2151	148	116	2259	2151	148	116
1-4	1507	1456	136	136	431	558	4723	3501	431	558	4139	3152	431	558	4139	3152	431	558
5-9	1498	1466	130	134	381	429	4232	3066	381	429	3838	2857	381	429	3838	2857	381	429
10-14	1373	1363	113	124	305	364	7250	5278	305	364	6214	4571	305	364	6214	4571	305	364
15-19	1225	1169	103	142	261	322	7105	5128	261	322	6245	4513	261	322	6245	4513	261	322
20-24	2368	2193	170	162	436	356	6336	6178	288	356	5404	5294	421	438	5404	5294	421	438
25-29	2798	2708	170	136	325	317	6379	6893	325	317	6032	6841	384	472	6032	6841	384	472
30-34	1347	1429	143	159	285	294	5787	7479	285	294	6155	6413	368	436	6155	6413	368	436
35-39	1205	1509	131	173	265	258	6362	6883	265	258	6270	7063	335	364	6270	7063	335	364
40-44	1233	1567	142	150	251	260	5635	6136	251	260	6559	7586	268	342	6559	7586	268	342
45-49	1151	1511	130	123	216	231	4818	5346	216	231	6064	6996	257	275	6064	6996	257	275
50-54	1139	1465	110	85	191	179	4014	4651	191	179	5184	6264	213	243	5184	6264	213	243
55-59	1031	1241	90	61	159	142	3464	4200	159	142	4783	6027	177	227	4783	6027	177	227
60-64	878	970	53	42	100	100	3405	3569	150	100	4078	5459	201	200	4078	5459	201	200
65-69	669	877	50	38	76	59	2212	2467	76	59	3364	4298	120	145	3364	4298	120	145
70-74	415	525	32	10	48	48	1181	1528	35	48	2156	2824	81	93	2156	2824	81	93
75-79#	377	479	19	16	23	11	513	678	23	11	1044	1467	42	40	1044	1467	42	40
80-84#	0	0	0	0	0	0	257	396	12	13	586	1010	31	43	586	1010	31	43
85-UP	62	90	4	2														
TOTALS	20154	21905	1690	1705	4622	4656	99554	104060	4622	4656	120011	129288	6592	7042	120011	129288	6592	7042
GRAND TOTAL				45454		212892								262933				

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						OBSERVED DEATHS BY CAUSE AND YEAR						OBSERVED DEATHS BY CAUSE AND YEAR					
	1949	1950	49-50	1959	1960	1961	1949	1950	49-50	1959	1960	1961	1949	1950	49-50	1959	1960	1961
TOTAL	393	872	1265	1534	1834	1921	2512	2669	2512	2512	2669	2789	2512	2669	2512	2512	2669	2789
CV-REFNL	150	352	514	704	846	856	1139	1236	1139	1139	1236	1293	1139	1236	1139	1139	1236	1293
HEART	110	242	358	476	614	617	835	880	835	835	880	963	835	880	835	835	880	963
NON CV-R	235	516	751	830	988	1065	1373	1433	1373	1373	1433	1496	1373	1433	1373	1373	1433	1496
CANCER	53	121	174	229	255	292	443	452	443	443	452	491	443	452	443	443	452	491

CITY CHARACTERISTICS

CODE

STATE	ARIZONA
STATE RANK BY POPULATION	24
1950 POP./SQ. MILE	3785
1970 POP./SQ. MILE	3287
1949 MED. FAM. INCOME	3110
1969 MED. FAM. INCOME	8759
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	49
JULY MEAN TEMPERATURE	86
MEAN ANN. PRECIPITATION	10
LAND RESOURCE REGION	D
WATER SOURCE	GROUND
TOTAL HARDNESS	138 PPM
NON-CARBONATE HARDNESS	3 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE 1949-50 1959-61 1969-71

TOTAL OBSERVED 1265.0 5289.0 7970.0
EXPECTED* 781.9 5096.4 7773.6
OBS/EXP 1.618 1.038 1.025CV-REFNL OBSERVED 514.0 2406.0 3668.0
EXPECTED* 419.3 2661.3 4430.6
OBS/EXP 1.226 0.904 0.828HEART OBSERVED 358.0 1707.0 2668.0
EXPECTED* 300.0 1918.5 3128.3
OBS/EXP 1.193 0.890 0.853NON CV-R OBSERVED 751.0 2883.0 4302.0
EXPECTED* 362.6 2435.1 3343.0
OBS/EXP 2.071 1.184 1.287CANCER OBSERVED 174.0 776.0 1386.0
EXPECTED* 129.9 831.5 1230.5
OBS/EXP 1.339 0.933 1.126

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT 1	240	236	49	48
1-4	931	835	182	194
5-9	818	862	190	172
10-14	695	636	164	184
15-19	671	866	159	210
20-24	788	1042	155	213
25-29	827	1003	139	191
30-34	837	924	152	230
35-39	851	976	186	241
40-44	734	914	181	234
45-49	751	883	173	220
50-54	691	744	137	172
55-59	655	764	135	144
60-64	617	616	101	112
65-69	561	542	91	103
70-74	472	409	55	60
75-79*	389	320	50	60
80-84*	0	0	0	0
85-89*	57	41	5	17
TOTALS	11585	12613	2304	2805
GRAND TOTAL				2907

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	449	453	902	437	515	545	1497	653	688	682	2033
CV-RNAL	199	242	441	238	289	296	823	388	350	408	1146
HEART	133	172	305	180	219	219	618	284	253	303	840
NON CV-R	250	211	461	199	265	249	674	267	338	274	877
CANCER	75	58	133	82	70	89	241	91	114	109	314

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	902.0	1497.0	2023.0
EXPECTED*	652.2	1367.9	1919.4
OBS/EXP	1.383	1.094	1.054
CV-RENAL			
OBSERVED	441.0	823.0	1146.0
EXPECTED*	362.6	816.4	1191.3
OBS/EXP	1.216	1.608	0.962
HEART			
OBSERVED	305.0	618.0	840.0
EXPECTED*	255.8	573.1	824.7
OBS/EXP	1.193	1.078	1.019
NON CV-R			
OBSERVED	461.0	674.0	877.0
EXPECTED*	289.6	551.5	728.1
OBS/EXP	1.592	1.222	1.205
CANCER			
OBSERVED	133.0	241.0	314.0
EXPECTED*	104.9	216.9	292.5
OBS/EXP	1.268	1.111	1.073

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	ARKANSAS
1950 RANK BY POPULATION	416
1950 POP./SQ. MILE	3663
1970 POP./SQ. MILE	3523
1950 MED. F.M. INCOME	2347
1969 MED. F.M. INCOME	6030
URBAN CLASS.	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	43
JULY MEAN TEMPERATURE	82
MEAN ANN. PRECIPITATION	53
LAND RESOURCE REGION	N
WATER SOURCE	SUPFACE
TOTAL HARDNESS	33 PPM
NON-CARBONATE HARDNESS	15 PPM
FLOODPLAIN STATUS	NO REFLUENTIAL LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	785	747	277	261	752	776	359	334	798	791	392	394
1-4	2963	2905	1008	949	2897	2774	1391	1369	2809	2617	1381	1397
5-9	2742	2768	936	917	3220	3287	1454	1451	4161	4152	1952	2029
10-14	2198	2195	772	821	3326	3339	1187	1180	4240	4216	2060	2006
15-19	1905	2488	711	1031	2407	3154	874	1042	3704	3923	1650	1865
20-24	2647	3865	803	1128	2568	2992	647	844	3467	4493	1241	1700
25-29	3333	3974	806	997	2362	2470	617	754	3646	3823	958	1126
30-34	3168	3578	740	1023	2467	2907	594	791	2951	3046	651	945
35-39	2910	3315	784	1068	2807	3126	571	820	2608	2810	647	847
40-44	2828	3306	740	967	2596	3058	632	858	2846	3329	636	863
45-49	2445	2965	749	925	2601	2971	659	957	3100	3530	629	845
50-54	2080	2489	605	744	2456	2912	625	746	2757	3294	655	776
55-59	1846	2181	531	553	2117	2698	553	731	2502	3019	593	757
60-64	1481	1791	403	414	1664	2258	476	550	2106	2803	514	705
65-69	1125	1585	384	451	1438	2027	465	530	1575	2501	490	696
70-74	776	1066	226	285	1101	1524	301	347	1076	1957	368	476
75-79*	0	0	0	0	657	1140	184	230	744	1493	243	316
80-84*	0	0	0	0	339	644	93	84	352	867	136	185
85-UP*	109	190	32	69	207	422	58	94	249	692	103	169
TOTALS	36102	42552	10711	12848	37982	44479	11740	13612	45731	53356	15299	18097
GRAND TOTAL				102213				107813				132483

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	2112.0	3841.0	4594.0		2112.0	3841.0	4594.0		2112.0	3841.0	4594.0	
CV-RENAL												
OBSERVED	1162.0	2092.0	2509.0									
EXPECTED*	1035.2	2049.4	2576.9									
OBS/EXP	1.122	1.021	0.974									
HEART												
OBSERVED	793.0	1406.0	1668.0									
EXPECTED*	718.1	1413.8	1762.4									
OBS/EXP	1.104	0.994	0.946									
NON CV-R												
OBSERVED	950.0	1749.0	2085.0									
EXPECTED*	904.9	1613.6	1935.1									
OBS/EXP	1.050	1.084	1.077									
CANCER												
OBSERVED	284.0	578.0	755.0									
EXPECTED*	302.0	559.6	670.1									
OBS/EXP	0.940	1.033	1.127									

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

CAUSE	1949-50				1959-61				1969-71			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	1031	1081	2112	12848	1251	1308	1282	3841	1570	1525	1499	4594
CV-RENAL	566	596	1162	592	692	728	672	2092	864	814	831	2509
HEART	385	408	793	408	455	588	446	1406	588	522	558	1668
NON CV-R	465	485	950	284	559	580	610	1749	706	711	668	2085
CANCER	124	160	284	284	180	204	194	578	276	258	221	755
STATE												
1950 RANK BY POPULATION												
1950 POP/50. MILE												
1970 POP/50. MILE												
1949 MED. FAM. INCOME												
1969 MED. FAM. INCOME												
URBAN CLASS												
1950 URBAN AREA RANK												
JAN MEAN TEMPERATURE												
JULY MEAN TEMPERATURE												
MEAN ANN. PRECIPITATION												
LAND RESOURCE REGION												
WATER SOURCE												
TOTAL HARDNESS												
NON-CARBONATE HARDNESS												
FLUORIDATION STATUS												

FLUORIDATED IN 1951

POPULATION

BY AGE, RACE, SEX AND CENSUS YEAR

AGE	GROUP	1950				
		WM	WF	NM	NP	
LT	1	305	371	141	135	
1-4		1531	1453	539	543	
5-9		1405	1310	394	516	
10-14		1058	999	415	455	
15-19		857	1051	378	442	
20-24		1115	1475	386	512	
25-29		1709	1573	447	490	
30-34		1653	1400	367	402	
35-39		1461	1289	339	459	
40-44		1159	1162	302	397	
45-49		1018	984	312	356	
50-54		1210	762	275	300	
55-59		1039	662	232	303	
60-64		756	424	184	165	
65-69		407	413	157	179	
70-74		268	260	66	120	
75-79		236	247	92	80	
80-84		0	0	0	0	
85-UP		25	34	15	21	
TOTALS		17222	15909	5161	5805	
GRAND TOTAL					44097	

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	50-61 SUM	1959	1970	1971	69-71 SUM
TOTAL	353	328	681	470	498	526	1494	650	677	729	2056
CV-RENAL	167	151	318	239	238	279	756	318	338	373	1029
HEART	108	96	204	170	162	188	520	216	248	253	717
NON CV-R	186	177	363	231	260	247	738	362	339	356	1027
CANCER	59	56	115	76	83	64	223	111	118	136	365

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1970 MED. FAM. INCOME	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANNUAL PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
ARKANSAS	267	329	321	2327	2526	8472	CENTRAL	80	41	81	47	1	1	18 PPM	6 PPM	FLUORIDATED

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	229	189	202	230	313	280	215	244
1-4	923	874	803	759	1119	1103	909	959
5-9	883	827	682	748	1294	1239	1068	1107
10-14	702	663	617	620	1245	1156	870	918
15-19	561	667	646	610	838	937	733	737
20-24	613	955	614	831	734	943	589	689
25-29	824	931	603	643	861	877	317	430
30-34	788	906	494	585	919	1009	313	546
35-39	857	863	503	648	891	970	363	474
40-44	737	822	429	544	872	955	362	465
45-49	657	699	423	573	881	867	402	540
50-54	573	605	393	406	739	811	372	484
55-59	451	540	335	358	592	688	360	446
60-64	411	426	262	249	472	528	283	343
65-69	294	402	280	296	361	540	309	403
70-74	227	276	144	163	306	393	228	274
75-79#	191	275	146	150	174	270	159	161
80-84#	0	0	0	0	85	149	80	78
85-UP	29	40	26	35	51	76	58	68
TOTALS	9950	10960	7602	8650	12747	13789	7990	9511
GRAND TOTAL				37162				44037

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL				TOTAL				TOTAL			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
	768.0	1347.0	1.779.0		768.0	1347.0	1.779.0		768.0	1347.0	1.779.0	
	1.069	0.974	1.012		1.069	0.974	1.012		1.069	0.974	1.012	
CV-RENAL												
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
	401.0	787.0	1.022.0		401.0	787.0	1.022.0		401.0	787.0	1.022.0	
	366.6	736.4	1.091.0		366.6	736.4	1.091.0		366.6	736.4	1.091.0	
	1.094	1.069	0.937		1.094	1.069	0.937		1.094	1.069	0.937	
HEART												
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
	266.0	546.0	0.733.0		266.0	546.0	0.733.0		266.0	546.0	0.733.0	
	248.3	496.9	0.736.5		248.3	496.9	0.736.5		248.3	496.9	0.736.5	
	1.071	1.099	1.003		1.071	1.099	1.003		1.071	1.099	1.003	
NON CV-R												
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
	367.0	560.0	0.957.0		367.0	560.0	0.957.0		367.0	560.0	0.957.0	
	351.6	863.7	1.108		351.6	863.7	1.108		351.6	863.7	1.108	
	1.044	0.866			1.044	0.866			1.044	0.866		
CANCER												
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
	85.0	196.0	0.310.0		85.0	196.0	0.310.0		85.0	196.0	0.310.0	
	104.5	278.4	0.979		104.5	278.4	0.979		104.5	278.4	0.979	
	0.813	1.113			0.813	1.113			0.813	1.113		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949-50				1959-61				1969-71			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
STATE	320	263	246	249	320	263	246	249	320	263	246	249
1950 RANK BY POPULATION	1142	1078	920	977	1142	1078	920	977	1142	1078	920	977
1950 POP/SQ. MILE	1611	1555	1347	1250	1611	1555	1347	1250	1611	1555	1347	1250
1970 POP/SQ. MILE	1586	1530	1347	1396	1586	1530	1347	1396	1586	1530	1347	1396
1949 MED. FAM. INCOME	1347	1369	1468	1698	1347	1369	1468	1698	1347	1369	1468	1698
1969 MED. FAM. INCOME	1117	1365	1161	1385	1117	1365	1161	1385	1117	1365	1161	1385
URBAN CLASS	1233	1277	439	533	1233	1277	439	533	1233	1277	439	533
1950 URBAN AREA RANK	1038	1028	363	465	1038	1028	363	465	1038	1028	363	465
JAN MEAN TEMPERATURE	909	972	344	478	909	972	344	478	909	972	344	478
JULY MEAN TEMPERATURE	1143	1143	374	606	1143	1143	374	606	1143	1143	374	606
MEAN ANN. PRECIPITATION	1058	1048	394	535	1058	1048	394	535	1058	1048	394	535
LAND RESOURCE REGION	941	1049	430	521	941	1049	430	521	941	1049	430	521
WATER SOURCE	898	920	448	573	898	920	448	573	898	920	448	573
TOTAL HARDNESS	691	878	398	538	691	878	398	538	691	878	398	538
NON-CARBONATE HARDNESS	502	758	417	561	502	758	417	561	502	758	417	561
FLUORIDATION STATUS	354	552	219	379	354	552	219	379	354	552	219	379
	188	443	304	304	188	443	304	304	188	443	304	304
	146	254	130	171	146	254	130	171	146	254	130	171
	87	144	106	152	87	144	106	152	87	144	106	152
	16138	17626	10854	12771	16138	17626	10854	12771	16138	17626	10854	12771
				57389				57389				57389

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
STATE	362	406	406	768	495	409	1347	1347	701	658	620	1022
1950 RANK BY POPULATION	186	215	239	401	186	215	239	401	186	215	239	401
1950 POP/SQ. MILE	119	147	266	367	119	147	266	367	119	147	266	367
1949 MED. FAM. INCOME	176	191	123	176	176	191	123	176	176	191	123	176
1969 MED. FAM. INCOME	40	45	85	85	40	45	85	85	40	45	85	85
URBAN CLASS	362	406	406	768	495	409	1347	1347	701	658	620	1022
1950 URBAN AREA RANK	186	215	239	401	186	215	239	401	186	215	239	401
JAN MEAN TEMPERATURE	119	147	266	367	119	147	266	367	119	147	266	367
JULY MEAN TEMPERATURE	176	191	123	176	176	191	123	176	176	191	123	176
MEAN ANN. PRECIPITATION	40	45	85	85	40	45	85	85	40	45	85	85
LAND RESOURCE REGION	362	406	406	768	495	409	1347	1347	701	658	620	1022
WATER SOURCE	186	215	239	401	186	215	239	401	186	215	239	401
TOTAL HARDNESS	119	147	266	367	119	147	266	367	119	147	266	367
NON-CARBONATE HARDNESS	176	191	123	176	176	191	123	176	176	191	123	176
FLUORIDATION STATUS	40	45	85	85	40	45	85	85	40	45	85	85

FLUORIDATED IN 1969

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	768	734	116	124	690	610	94	94
1-4	2946	2833	424	490	2187	2210	323	348
5-9	2124	2132	295	315	2196	2119	351	278
10-14	1483	1481	212	256	2328	2062	249	246
15-19	1707	1594	194	217	4756	1918	207	124
20-24	2908	2701	315	361	5561	1962	425	224
25-29	3322	3204	425	414	2151	1586	315	199
30-34	2584	2530	329	331	1979	1596	277	215
35-39	2230	2185	297	243	2050	1817	189	162
40-44	1866	1828	189	131	1600	1726	101	103
45-49	1562	1555	156	80	1347	1702	64	68
50-54	1409	1525	70	56	1354	1494	69	37
55-59	1171	1335	55	42	1178	1221	66	30
60-64	988	1141	21	11	931	1261	28	16
65-69	770	768	4	24	858	1065	45	32
70-74	489	711	14	7	570	896	18	18
75-79	403	711	15	11	372	591	12	7
80-84	0	0	0	0	190	307	4	8
85-UP	75	129	2	1	74	158	5	1
TOTALS	28804	29300	3173	3153	32589	26254	2791	2221
GRAND TOTAL				64430			63855	

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	560	505	1065	1558	616	599	594	1809
CV-RENAL	305	292	597	851	292	319	324	935
HEART	238	230	468	625	214	231	232	677
NON CV-R	255	213	468	707	324	280	276	874
CANCER	87	75	162	249	136	107	106	349
CALIFORNIA								
STATE								
1950 RANK BY POPULATION								
1950 POB/SQ. MILE								
1970 POB/SQ. MILE								
1949 MED. FAR. INCOME								
1969 MED. FAR. INCOME								
URBAN RURAL AREA RANK								
1950 URBAN AREA RANK								
JAN MEAN TEMPERATURE								
JULY MEAN TEMPERATURE								
MEAN ANN. PRECIPITATION								
LAND RESOURCE REGION								
WATER SOURCE								
TOTAL HARDNESS								
NON-CARCINATE HARDNESS								
FLUORIDATION STATUS								
NO ARTIFICIAL, LOW NATURAL								

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	1065.0	1558.0	1809.0	1809.0	1809.0
TOTAL	EXPECTED*	999.3	1608.0	2033.4	2033.4	2033.4
	OBS/EXP	1.066	0.969	0.890	0.890	0.890
CV-RENAL	OBSERVED	597.0	851.0	935.0	935.0	935.0
	EXPECTED*	506.8	850.0	1116.2	1116.2	1116.2
	OBS/EXP	1.178	0.999	0.816	0.816	0.816
HEART	OBSERVED	468.0	625.0	677.0	677.0	677.0
	EXPECTED*	361.6	604.8	799.0	799.0	799.0
	OBS/EXP	1.294	1.033	0.847	0.847	0.847
NON CV-R	OBSERVED	468.0	707.0	874.0	874.0	874.0
	EXPECTED*	492.5	756.0	887.2	887.2	887.2
	OBS/EXP	0.950	0.935	0.985	0.985	0.985
CANCER	OBSERVED	162.0	249.0	349.0	349.0	349.0
	EXPECTED*	154.1	247.4	303.3	303.3	303.3
	OBS/EXP	1.051	1.006	1.151	1.151	1.151

NON-CARBONATE HARDNESS 51 PPM
NO ARTIFICIAL, LOW NATURAL
FLUORIDATION STATUS

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WP	NM	NP	WM	WP	WM	WP	NM	NP	WM	WP	WM	WP	NM	NP	WM	WP
LT 1	343	314	27	27	493	436	1997	1889	508	126	476	464	1821	1714	148	129	497	526
1-4	1260	1257	87	70	1997	1889	2610	2547	623	608	1821	1714	2827	2797	701	671	2092	2090
5-9	1237	1245	72	83	2610	2547	2417	2396	475	497	2417	2396	2792	2880	664	716	2746	2746
10-14	1028	997	66	64	1686	1789	1077	1296	338	351	1948	2455	2729	2746	626	668	2455	2455
15-19	881	1029	76	58	1077	1296	1297	1428	202	288	2039	2197	1948	2455	335	466	2197	2197
20-24	1095	1193	77	77	1297	1428	1623	1806	251	272	2039	2197	1948	2455	335	466	2039	2197
25-29	1371	1439	102	91	1623	1806	1848	1937	284	266	1506	1622	1808	1788	263	292	1506	1622
30-34	1371	1362	88	81	1623	1806	1695	1772	212	265	1506	1622	1742	1903	228	294	1506	1622
35-39	1343	1363	132	106	1848	1937	1568	1544	293	267	1780	1904	1742	1903	228	294	1780	1904
40-44	1268	1249	112	68	1695	1772	1568	1544	293	267	1780	1904	1742	1903	228	294	1780	1904
45-49	1156	1105	84	66	1568	1544	1192	1288	219	216	1575	1744	1575	1744	234	314	1575	1744
50-54	957	961	80	50	1192	1288	1039	1094	201	184	1402	1504	1402	1504	243	272	1402	1504
55-59	826	831	71	44	1039	1094	828	978	135	148	1059	1297	1059	1297	215	205	1059	1297
60-64	733	697	38	31	828	978	668	865	154	97	812	1032	812	1032	211	209	812	1032
65-69	604	607	32	21	668	865	561	689	106	65	642	850	642	850	121	120	642	850
70-74	344	397	20	15	561	689	394	503	44	52	372	637	372	637	84	71	372	637
75-79#	297	359	29	8	394	503	162	258	31	20	236	436	162	258	33	42	236	436
80-84#	0	0	0	0	162	258	100	149	15	12	159	293	100	149	44	37	159	293
85-UP	43	63	4	2	100	149	23255	24664	4421	4508	27835	30263	23255	24664	5417	6000	27835	30263
TOTALS	16157	16468	1197	962	23255	24664	4421	4508	56848	69515	27835	30263	4421	4508	5417	6000	27835	30263
GRAND TOTAL				38784														

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	1124.0	1954.0	2199.0
OBSERVED	613.0	1583.9	2090.6
EXPECTED*	1.834	1.234	1.052
OBS/EXP			
CV-RENAL	492.0	871.0	1082.0
OBSERVED	328.0	859.5	1179.7
EXPECTED*	1.500	1.013	0.917
OBS/EXP			
HEART	368.0	619.0	779.0
OBSERVED	236.3	603.0	817.1
EXPECTED*	1.557	1.027	0.953
OBS/EXP			
NON CV-R	632.0	1083.0	1117.0
OBSERVED	285.0	724.4	910.9
EXPECTED*	2.218	1.495	1.226
OBS/EXP			
CANCER	157.0	295.0	370.0
OBSERVED	101.2	245.5	316.3
EXPECTED*	1.552	1.202	1.170
OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR										CITY CHARACTERISTICS		CODE
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	
TOTAL	672	452	1124	553	647	754	1954	701	768	730	2199	1950 RANK BY POPULATION	CALIFORNIA
CV-RENAL	272	220	492	284	308	279	871	339	375	368	1082	1950 POP/SQ. MILE	4701
HEART	211	157	368	197	225	197	619	248	263	268	779	1970 POP/SQ. MILE	2684
NON CV-R	400	232	632	269	339	475	1083	362	393	362	1117	1969 MED. FAM. INCOME	4374
CANCER	83	74	157	95	105	95	295	121	129	120	370	1969 MED. FAM. INCOME	10030
												URBAN CLASS	INDEPENDENT
												1950 URBAN AREA RANK	-
												JAN MEAN TEMPERATURE	46
												JULY MEAN TEMPERATURE	84
												MEAN ANN. PRECIPITATION	6
												LAND RESOURCE REGION	C
												WATER SOURCE	GROUND
												TOTAL HARDNESS	108 PPM
												NON-CARBONATE HARDNESS	11 PPM
												FLOODATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	106	111	0	0	82	83	0	0	92	108	1	0
1-4	467	485	3	1	380	387	1	0	336	337	4	9
5-9	698	698	0	3	795	797	1	1	813	771	4	15
10-14	670	670	3	1	973	1080	2	2	1129	1160	21	11
15-19	670	729	6	24	987	981	3	11	1220	1248	16	23
20-24	686	907	7	65	557	645	4	21	675	901	11	30
25-29	704	970	18	74	481	571	10	36	598	853	13	30
30-34	681	1044	34	95	517	827	11	29	528	859	18	29
35-39	814	1324	31	119	636	1136	6	63	601	949	10	34
40-44	1090	1474	35	122	845	1449	13	74	887	1342	16	38
45-49	1167	1653	25	74	1118	1620	23	109	1097	1474	20	43
50-54	1356	1664	24	70	1284	1664	16	114	1057	1552	16	56
55-59	1109	1286	18	47	1170	1597	18	90	1276	1579	15	50
60-64	769	1134	11	23	1041	1481	19	44	1173	1547	11	44
65-69	507	787	4	13	880	1236	5	20	946	1484	6	23
70-74	313	525	6	1	563	883	7	4	751	1223	6	17
75-79*	250	482	1	1	325	498	0	2	485	752	3	3
80-84*	0	0	0	0	141	264	0	0	227	396	2	4
85-UP	47	96	0	0	76	140	0	0	101	224	1	3
TOTALS	12049	16024	226	733	12771	17286	140	620	14032	18719	203	462
GRAND TOTAL				29032				30817				33416

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1959	1960	1961	SUM	1970	1971	SUM	
TOTAL	205	231	436		378	450	393	1221	516	473	1395	
CV-RENAL	143	145	288		234	270	254	758	311	280	826	
HEART	103	98	201		169	187	182	538	232	177	198	
NON CV-R	62	86	148		144	180	139	463	205	171	569	
CANCER	30	44	74		66	91	79	236	104	114	310	

CITY CHARACTERISTICS

CAUSE	1949				1959-61				1969-71			
	1949	1950	SUM		1959	1960	1961	SUM	1970	1971	SUM	
TOTAL	205	231	436		378	450	393	1221	516	473	1395	
CV-RENAL	143	145	288		234	270	254	758	311	280	826	
HEART	103	98	201		169	187	182	538	232	177	198	
NON CV-R	62	86	148		144	180	139	463	205	171	569	
CANCER	30	44	74		66	91	79	236	104	114	310	

STATE
1950 BANK BY POPULATION 422
1950 POP/SQ. MILE 5806
1970 POP/SQ. MILE 5862
1949 MED. FAM. INCOME 6489
1969 MED. FAM. INCOME 20434
URBAN CLASS PRINCE
1950 URBAN AREA RANK 3
JAN MEAN TEMPERATURE 53
JULY MEAN TEMPERATURE 67
MEAN ANN. PRECIPITATION 12
LAND RESOURCE REGION C
WATER SOURCE
TOTAL HARDNESS 134 PPM
NON-CARBONATE HARDNESS 1 PPM
FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	793	784	0	2	786	774	6	5	667	561	17	15
1-4	3477	3307	7	5	3072	2911	17	16	2326	2268	53	36
5-9	3835	3980	5	2	3735	3634	17	11	3112	3041	59	44
10-14	2497	2576	16	11	3894	3833	10	12	3334	3238	40	48
15-19	1860	1957	8	4	3227	3547	8	2	3352	3458	35	38
20-24	1847	2120	9	4	2420	2613	19	16	3038	3693	61	63
25-29	2817	3595	5	6	2565	2376	23	21	3348	3181	64	78
30-34	3998	4462	2	6	2570	2666	12	9	2520	2395	58	55
35-39	4252	4295	3	5	3169	3697	12	10	2223	2132	38	47
40-44	3510	3262	6	4	3804	4153	11	12	2506	2606	26	28
45-49	2611	2341	3	6	3761	4071	6	10	2920	3473	32	34
50-54	2092	1989	6	3	3249	3168	5	7	3247	3786	19	26
55-59	1690	1649	0	4	2540	2456	4	6	3281	3527	12	11
60-64	1102	1391	1	2	1805	1855	3	4	2555	2704	11	14
65-69	817	1106	2	3	1220	1658	3	1	1518	1891	10	5
70-74	510	745	0	4	906	1268	1	1	964	1401	6	6
75-79#	466	710	0	1	544	854	0	0	578	1165	2	4
80-84#	0	0	0	0	230	430	0	1	327	736	2	3
85-UP	64	129	0	0	150	240	0	1	204	453	0	2
TOTALS	38038	40398	69	72	43647	46206	157	145	42060	45709	545	557
GRAND TOTAL				78577				90155				88871

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1016.0	2150.0	0.472		1064.8	2379.3	0.448		1064.8	2379.3	0.448	
					0.954	0.904	1.054		0.954	0.904	1.054	
CV-RENAL	528.0	1210.0	0.436		546.6	1306.3	0.418		546.6	1306.3	0.418	
					0.966	0.926	1.043		0.966	0.926	1.043	
HEART	380.0	840.0	0.452		396.7	945.7	0.419		396.7	945.7	0.419	
					0.958	0.888	1.079		0.958	0.888	1.079	
NON CV-R	488.0	940.0	0.520		518.2	1073.0	0.483		518.2	1073.0	0.483	
					0.942	0.876	1.076		0.942	0.876	1.076	
CANCER	178.0	372.0	0.478		178.3	404.9	0.440		178.3	404.9	0.440	
					0.939	0.919	1.021		0.939	0.919	1.021	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1959				1969				1971			
	1949	1950	1951	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM	1971	1970	1971	SUM
TOTAL	542	474	1016	2032	664	741	745	2150	856	899	890	2645	890	899	890	2679
CV-RENAL	283	245	528	1056	391	415	404	1210	481	467	467	1415	467	467	467	1401
HEART	199	181	380	660	266	289	285	840	341	325	329	995	329	325	329	983
NON CV-R	259	229	488	1176	273	326	341	940	375	432	423	1230	423	432	423	1278
CANCER	98	80	178	356	101	121	150	372	161	181	197	539	197	181	197	575

CITY CHARACTERISTICS

CODE

STATE	CALIFORNIA	
	1950 POP. BY POPULATION	1960 POP. BY POPULATION
1950 POP/1000	146	146
1970 POP/1000	146	146
1949 MED. FAM. INCOME	5917	5917
1969 MED. FAM. INCOME	4039	4039
URBAN CLASS	11502	11502
1950 URBAN AREA RANK	3	3
JAN MEAN TEMPERATURE	52	52
JULY MEAN TEMPERATURE	73	73
MEAN ANN. PRECIPITATION	13	13
LAND RESOURCE REGION	C	C
WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE
TOTAL HARDNESS	207 PPM	207 PPM
NON-CARBONATE HARDNESS	12 PPM	12 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960		
	WM	HF	NP	WM	HF	NP
IT 1	585	557	48	539	520	494
1-4	2480	2404	140	2014	1917	2124
5-9	2237	2249	149	2040	2169	2090
10-14	1544	1569	72	2028	2007	2347
15-19	1282	1404	59	1562	1769	1867
20-24	1822	1822	74	1444	1534	917
25-29	2273	2469	124	1486	1373	640
30-34	2225	2265	180	1309	1238	914
35-39	2060	1695	155	1332	1282	1277
40-44	1617	1570	84	1441	1580	1478
45-49	1308	1157	84	1388	1525	1248
50-54	1012	985	45	1447	1454	742
55-59	738	805	45	1217	1242	462
60-64	595	682	14	1079	1024	360
65-69	457	553	11	721	799	253
70-74	297	393	10	721	799	108
75-79	254	317	7	372	550	95
80-84	0	0	2	250	386	64
85-UP	41	75	1	141	197	43
TOTALS	22529	23173	1150	21076	21945	14562
GRAND TOTAL			47391			71812

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	662.0	1432.0	1773.0
EXPECTED*	605.3	1563.8	1681.2
OBS/EXP	1.094	0.916	1.055
CV-RENAL			
OBSERVED	338.0	675.0	759.0
EXPECTED*	293.4	713.1	756.6
OBS/EXP	1.152	0.947	1.011
HEART			
OBSERVED	244.0	472.0	542.0
EXPECTED*	211.7	499.8	506.9
OBS/EXP	1.153	0.944	1.082
NON CV-P			
OBSERVED	324.0	757.0	1014.0
EXPECTED*	311.9	850.7	930.7
OBS/EXP	1.039	0.890	1.090
CANCER			
OBSERVED	85.0	228.0	266.0
EXPECTED*	94.9	219.8	215.7
OBS/EXP	0.895	1.037	1.233

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM
TOTAL	334	328	662	460	460	512	1432
CV-RNAL	171	167	338	211	232	232	675
HEART	123	121	244	146	156	170	472
NON CV-R	163	161	324	249	228	280	757
CANCER	40	45	85	73	64	91	228

CITY CHARACTERISTICS	CODE
1. City or town	1
2. Suburban	2
3. Rural	3
4. Unincorporated	4
5. Other	5

STATE	CALIFORNIA
1950 RANK BY POPULATION	244
1950 POP/50. MILE	6955
1970 POP/50. MILE	8375
1949 MED. FAM. INCOME	3761
1969 MED. FAM. INCOME	8729
URBAN CLASS	PRINCE
1950 URBAN AREA RANK	3
JAN MEAN TEMPERATURE	53
JULY MEAN TEMPERATURE	67
MEAN ANN. PRECIPITATION	12
LAND RESOURCE REGION	C
WATER RESOURCE	GROUND AND SURFACE
TOTAL HARDNESS	209 PPM
NON-CARBONATE HARDNESS	34 PPM
FLUORIDATION STANDS	NO ARTIFICIAL-LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	754	788	72	97	1304	1292	214	180	1223	1118	245	232
1-4	3287	3111	304	316	5333	5032	810	725	4508	4392	1007	966
5-9	3241	3213	269	304	6291	5920	899	836	6534	6423	1375	1370
10-14	2583	2590	280	239	5530	5427	649	726	6640	6575	1335	1335
15-19	2385	2712	248	265	3926	4559	472	500	6385	6831	1234	1196
20-24	2896	3415	263	341	3455	4201	357	415	7057	7863	971	1158
25-29	3426	3781	339	365	3910	4012	348	405	5322	5298	610	686
30-34	3503	3601	328	330	3907	4239	377	488	3918	4068	508	606
35-39	3481	3501	344	295	4190	4575	405	446	3556	3893	464	581
40-44	2988	3132	280	218	3963	4066	390	408	3765	4290	474	622
45-49	2558	2664	261	185	3521	3595	416	360	3935	4410	466	530
50-54	2337	2351	191	136	2923	3243	300	252	3622	3954	438	512
55-59	2071	2211	127	119	2444	2750	277	220	3057	3501	401	398
60-64	1926	1977	133	78	2009	2538	220	171	2487	3236	339	355
65-69	1656	1677	119	72	1964	2479	161	183	2039	2787	325	294
70-74	1656	1677	119	72	1964	2479	161	183	1677	2464	220	200
75-79*	991	1188	63	26	1331	1859	92	50	1296	2045	151	153
80-84*	0	0	0	0	498	722	45	80	84	134	80	79
85-UP	163	236	12	4	278	481	31	20	491	594	70	54
TOTALS	41234	43327	3681	3427	58281	62525	6607	6516	68386	75086	10773	11327
GRAND TOTAL				91669				133929				165972

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	2163.0	1759.4	1.230		4141.0	3994.4	1.037		4958.0	5495.0	0.902	
CV-RENAL												
OBSERVED	1077.0				2177.0				2535.0			
EXPECTED*	973.5				2228.0				3216.2			
OBS/EXP	1.106				0.977				0.788			
HEART												
OBSERVED	723.0				1541.0				1785.0			
EXPECTED*	693.6				1566.8				2215.3			
OBS/EXP	1.042				0.984				0.806			
NON CV-R												
OBSERVED	1096.0				1954.0				2423.0			
EXPECTED*	795.4				1766.3				2278.8			
OBS/EXP	1.383				1.112				1.063			
CANCER												
OBSERVED	326.0				672.0				767.0			
EXPECTED*	283.3				616.9				806.6			
OBS/EXP	1.151				1.089				0.951			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	1959	1961	1969	1970	1971	69-71 SUM	STATE	1950 RANK BY POPULATION	CALIFORNIA	
TOTAL	1153	1010	1306	1377	1458	1689	1616	4958	124	1500	6111	
CV-RENAL	574	503	691	741	745	838	841	2535	124	1970	3971	
HEART	381	342	476	530	535	586	625	1785	124	1949	3757	
NON CV-R	579	507	615	713	636	797	775	2423	124	1969	8971	
CANCER	165	161	198	226	248	287	233	767	124	1950	96	
									44	JAN MEAN TEMPERATURE	96	
									82	JULY MEAN TEMPERATURE	82	
									9	MEAN ANN. PRECIPITATION	9	
									C	LAND RESOURCE REGION	C	
										WATER SOURCE		
										TOTAL HARDNESS		
										NON-CARBONATE HARDNESS	119 PPM	
										FLOODATION STATUS	0 PPM	
										NO ARTIFICIAL LOW NATURAL		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
1-1	682	690	2	7	1035	1008	6	13	982	952	35	22
1-4	2534	2532	12	5	3523	3472	34	29	3369	3311	82	99
5-9	2833	2971	6	10	4039	3987	23	18	4381	4407	101	83
10-14	2363	2424	16	3	3959	4068	11	10	4490	4475	85	75
15-19	3441	2556	6	7	3441	4043	14	22	4363	4567	76	71
20-24	3003	3166	30	18	3316	3635	35	37	4308	5401	97	140
25-29	3455	3196	18	15	3479	3088	36	26	4318	4853	151	178
30-34	3361	3738	16	11	3249	3319	22	28	3799	3613	120	109
35-39	3486	4109	12	9	3571	4148	20	26	3266	3335	87	83
40-44	3475	4083	4	6	3926	4487	16	11	3563	3877	56	74
45-49	3479	4031	10	6	4019	4846	16	10	3896	4618	45	65
50-54	3429	3983	9	8	3981	4561	14	7	4089	4857	36	48
55-59	2783	3463	0	8	3666	4333	12	9	3772	4738	33	47
60-64	2321	3112	2	7	3084	4080	6	8	3393	4370	24	23
65-69	1793	2618	3	2	2477	3728	7	5	2584	3883	22	26
70-74	1166	1899	2	1	1906	3064	7	11	1957	3538	13	28
75-79#	1142	2030	2	2	1194	2289	5	4	1293	2780	5	11
80-84#	0	0	0	0	622	1254	3	6	740	1935	6	14
85-89#	191	414	0	1	331	740	0	7	531	1356	5	17
TOTALS	43911	51515	150	126	54718	64150	287	287	59594	70866	1079	1213
GRAND TOTAL			95702				119442					132752

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	970	974	1944		1372	1390	1348	4110	1579	1567	1593	4729
CV-RENAL	579	585	1164		869	837	851	2557	923	930	981	2834
HEART	421	419	840		596	579	577	1752	625	625	644	1921
NON CV-R	391	389	780		503	553	497	1553	656	637	602	1895
CANCER	170	162	332		211	236	232	679	249	274	260	783

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL				TOTAL				TOTAL			
CV-RENAL	OBSERVED				OBSERVED				OBSERVED			
	1164.0				2557.0				2834.0			
	EXPECTED*				2833.3				3584.9			
HEART	OBSERVED				OBSERVED				OBSERVED			
	1262.0				1664.0				1921.0			
	EXPECTED*				2002.2				2488.3			
NON CV-R	OBSERVED				OBSERVED				OBSERVED			
	780.0				1553.0				1895.0			
	EXPECTED*				1913.3				2228.0			
CANCER	OBSERVED				OBSERVED				OBSERVED			
	332.0				679.0				783.0			
	EXPECTED*				882.6				822.6			
TOTALS	OBSERVED				OBSERVED				OBSERVED			
	332.0				679.0				783.0			
	EXPECTED*				882.6				822.6			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	CODE	
	1950 RANK BY POPULATION	1970 RANK BY POPULATION
CALIFORNIA	115	115
1950 POP./SQ. MILE	4714	4714
1970 POP./SQ. MILE	4515	4515
1949 MED. FAM. INCOME	4112	4112
1969 MED. FAM. INCOME	11651	11651
URBAN CLASS	FFINGE	FFINGE
1950 URBAN AREA RANK	3	3
JAN MEAN TEMPERATURE	52	52
JULY MEAN TEMPERATURE	73	73
MEAN ANN. PRECIPITATION	13	13
LAND RESOURCE REGION	C	C
WATER SOURCE	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS
TOTAL HARDNESS	188 PPM	188 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

HUNTINGTON PARK

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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	208	182	0	0	261	229	4	5	344	349	15	24
1-4	726	713	1	2	680	736	5	15	977	941	45	58
5-9	687	706	0	0	661	764	8	11	1089	1030	35	42
10-14	584	629	2	2	709	735	5	4	940	984	20	31
15-19	626	750	1	1	751	923	4	4	858	1105	33	40
20-24	979	1183	0	1	1034	1030	11	12	1214	1433	48	64
25-29	1311	1279	1	2	1085	772	9	11	1300	1069	62	68
30-34	1158	1317	1	1	992	803	10	10	1067	831	47	35
35-39	1268	1304	1	5	967	992	8	4	931	764	33	37
40-44	1125	1327	0	0	994	1214	5	5	1016	866	21	25
45-49	1153	1166	2	0	1171	1297	2	3	1002	1014	29	15
50-54	1044	1142	0	1	1111	1335	1	5	998	1194	10	17
55-59	908	1021	1	1	1028	1119	1	3	1017	1229	5	11
60-64	790	913	1	1	856	1066	1	2	954	1238	12	7
65-69	543	732	0	1	690	944	0	0	718	984	6	9
70-74	357	534	0	0	519	778	0	0	484	873	5	4
75-79#	347	557	0	0	309	526	2	0	333	661	1	5
80-84#	0	0	0	0	160	317	0	0	187	446	2	3
85-UP	60	93	0	0	90	162	0	0	147	259	2	2
TOTALS	13874	15548	11	17	14068	15682	76	94	15576	17240	431	497
GRAND TOTAL				29450				29920				33744

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	623.0	538.2	0.976		1167.0	1219.7	0.957		1577.0	1440.0	1.095	
CV-RENAL	364.0	367.6			661.0	723.7			873.0	865.4		
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
HEART	253.0	263.7			450.0	514.6			653.0	605.7		
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
NON CV-R	259.0	270.7			506.0	496.0			704.0	574.6		
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
CANCER	108.0	108.3			185.0	200.8			293.0	221.5		
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1961				1971			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	304	319	623	17	368	395	404	1167	513	506	558	1577	58	58	1577	411
CV-RENAL	165	199	364	0	199	237	225	661	294	280	299	873	299	299	873	10518
HEART	112	141	253	1	128	170	152	450	219	209	225	653	225	225	653	11248
NON CV-R	120	120	259	0	169	158	179	506	219	226	259	704	259	259	704	11248
CANCER	56	52	108	0	73	51	61	185	99	84	110	293	110	110	293	8406

CITY CHARACTERISTICS

STATE	CALIFORNIA	
	1950 RANK BY POPULATION	1950 RANK BY POPULATION
1950 POP/SQ. MILE	411	10518
1970 POP/SQ. MILE	11248	11248
1949 MED. FAM. INCOME	3770	3770
1969 MED. FAM. INCOME	8406	8406
URBAN CLASS	FRINGE	FRINGE
1950 URBAN AREA RANK	3	3
JAN MEAN TEMPERATURE	53	53
JULY MEAN TEMPERATURE	67	67
MEAN ANN. PRECIPITATION	12	12
LAND RESOURCE REGION	C	C
WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE
TOTAL HARDNESS	228 PPM	228 PPM
NON-CARBONATE HARDNESS	69 PPM	69 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	423	391	2	5	569	569	5	8	688	613	138	145
1-4	1621	1688	2	13	1834	1828	37	29	1998	1968	324	559
5-9	1814	1813	2	3	2061	2004	27	19	2435	2246	716	723
10-14	1320	1310	11	4	2150	2153	13	19	2485	2372	589	486
15-19	1084	1286	1	4	2018	2263	23	37	2369	2199	504	555
20-24	1461	1451	1	8	2281	2463	4	37	3289	3100	590	655
25-29	1853	1936	15	17	2171	1372	18	31	3895	3304	603	653
30-34	2069	2070	7	17	2054	1870	40	31	2534	2053	583	507
35-39	2069	2070	6	8	2158	2204	20	13	1867	1657	583	507
40-44	1887	1777	3	1	2312	2206	13	7	1984	2192	418	410
45-49	1682	1495	5	3	2368	2608	13	7	2174	2679	322	294
50-54	1412	1482	6	5	2207	2375	5	3	2547	2978	233	230
55-59	1160	1202	1	6	1837	1925	6	2	2484	3061	143	140
60-64	911	1117	1	2	1442	1714	6	5	2107	2462	85	86
65-69	679	861	1	0	1084	1380	2	3	1399	1858	62	55
70-74	472	644	2	1	789	1149	3	4	938	1847	34	35
75-79*	464	580	2	0	469	720	2	0	699	1312	18	38
80-84*	0	0	0	0	253	407	5	0	372	845	3	15
85-UP	104	109	0	0	138	221	0	0	372	570	15	17
TOTALS	22450	23575	81	79	30441	32421	300	228	36874	40457	6324	6330
GRAND TOTAL				46185				63390				89985

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959-61				1969-71			
	1949	1950	49-50	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	474	405	879	1758	542	649	767	1958	961	978	906	2845
HEART	258	235	693	1186	325	341	477	1143	538	557	523	1618
NON-CV-R	196	174	312	682	217	258	319	794	398	401	383	1178
CANCER	246	170	386	802	213	298	340	851	423	421	393	1227
	74	76	150	300	109	141	143	393	161	184	159	504

CITY CHARACTERISTICS

CODE

STATE	CALIFORNIA
1950 BANK BY POPULATION	26505
1950 POP/SQ. MILE	10111
1970 POP/SQ. MILE	10111
1949 MED. FAM. INCOME	4161
1969 MED. FAM. INCOME	10892
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	3
JAN MEAN TEMPERATURE	53
JULY MEAN TEMPERATURE	67
MEAN ANN. PRECIPITATION	12
LAND RESOURCE REGION	C
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	277 PPM
NON-CARBONATE HARDNESS	44 PPM
FLUORIDATION STATUS	NO ARTIFICIAL LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
HEART		314.0	772.0	1178.0		314.0	772.0	1178.0		314.0	772.0	1178.0
NON CV-R		386.0	851.0	1227.0		386.0	851.0	1227.0		386.0	851.0	1227.0
CANCER		150.0	393.0	504.0		150.0	393.0	504.0		150.0	393.0	504.0
		138.3	328.2	501.0		138.3	328.2	501.0		138.3	328.2	501.0
		1.084	1.197	1.006		1.084	1.197	1.006		1.084	1.197	1.006

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	2201	2263	90	81	2983	2903	233	250
1-4	9114	8745	349	325	10950	10463	973	898
5-9	8224	7859	298	292	12325	12139	740	770
10-14	6068	5974	246	199	12173	12093	527	563
15-19	5627	5710	236	152	13636	13076	531	571
20-24	4059	4102	162	326	10389	10362	957	616
25-29	40224	40711	363	328	10249	9765	742	643
30-34	9867	10394	270	252	11833	12146	670	487
35-39	8712	9005	227	169	11399	11638	396	400
40-44	7989	8408	177	137	10563	11233	322	309
45-49	7269	7935	134	122	9022	9436	268	208
50-54	6084	7135	85	87	8070	9436	180	165
55-59	5132	6823	80	71	6878	8410	129	128
60-64	4192	6335	77	46	6011	8462	129	120
65-69	2983	4839	38	28	4886	7649	86	70
70-74	3129	4907	18	9	3207	5392	50	43
75-79	0	0	0	0	1742	2929	23	23
80-84	580	891	2	11	869	1674	7	12
85-89								
TOTALS	117258	126922	3563	3024	164044	165355	8012	6757
GRAND TOTAL				250767				344168

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	5163.0	5406.2	0.956		11186.0	11976.5	0.933		13207.0	14664.7	0.901	
CV-RENAL												
OBSERVED	3047.0	3099.9	0.983		6041.0	6978.0	0.869		7617.0	8869.3	0.859	
EXPECTED*												
OBS/EXP												
HEART												
OBSERVED	2114.0	2196.8	0.962		4573.0	4918.4	0.930		5596.0	6145.6	0.911	
EXPECTED*												
OBS/EXP												
NON CV-R												
OBSERVED	2116.0	2303.0	0.919		4739.0	4988.5	0.948		5590.0	5791.5	0.965	
EXPECTED*												
OBS/EXP												
CANCER												
OBSERVED	799.0	870.3	0.918		1877.0	2184.6	0.859		2230.0	2841.6	0.785	
EXPECTED*												
OBS/EXP												

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1961				1969				1971				1973			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	2551	1496	1551	3047	3645	2163	2175	6441	3723	3812	11180	4406	4330	4471	13207	1267	2548	2480	2589	7617	1917	1850	1882	2230
CV-RENAL	1496	1040	1074	2114	2163	1490	1593	4739	3723	3812	11180	4406	4330	4471	13207	1267	2548	2480	2589	7617	1917	1850	1882	2230
HEART	1040	1055	1081	2116	1490	1482	1637	4739	3723	3812	11180	4406	4330	4471	13207	1267	2548	2480	2589	7617	1917	1850	1882	2230
NON CV-R	398	401	401	799	604	622	651	1877	3723	3812	11180	4406	4330	4471	13207	1267	2548	2480	2589	7617	1917	1850	1882	2230
CANCER																								

CITY CHARACTERISTICS

STATE	CODE		CITY CHARACTERISTICS		CODE	
	1950 RANK BY POPULATION	1960 RANK BY POPULATION	1950 RANK BY POPULATION	1960 RANK BY POPULATION	1950 RANK BY POPULATION	1960 RANK BY POPULATION
CALIFORNIA	41	41	1950 RANK BY POPULATION	1960 RANK BY POPULATION	1950 RANK BY POPULATION	1960 RANK BY POPULATION
1950 POP./SQ. MILE	7227	7227	1950 POP./SQ. MILE	1960 POP./SQ. MILE	1950 POP./SQ. MILE	1960 POP./SQ. MILE
1970 POP./SQ. MILE	7364	7364	1970 POP./SQ. MILE	1970 POP./SQ. MILE	1970 POP./SQ. MILE	1970 POP./SQ. MILE
1945 MED. FAM. INCOME	3605	3605	1945 MED. FAM. INCOME	1945 MED. FAM. INCOME	1945 MED. FAM. INCOME	1945 MED. FAM. INCOME
1969 MED. FAM. INCOME	16282	16282	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME
URBAN CLASS	FRINGE	FRINGE	URBAN CLASS	FRINGE	URBAN CLASS	FRINGE
1950 URBAN AREA RANK	3	3	1950 URBAN AREA RANK	3	1950 URBAN AREA RANK	3
JAN MEAN TEMPERATURE	54	54	JAN MEAN TEMPERATURE	54	JAN MEAN TEMPERATURE	54
JULY MEAN TEMPERATURE	70	70	JULY MEAN TEMPERATURE	70	JULY MEAN TEMPERATURE	70
MEAN ANNUAL PRECIPITATION	12	12	MEAN ANNUAL PRECIPITATION	12	MEAN ANNUAL PRECIPITATION	12
LAND RESOURCE REGION	C	C	LAND RESOURCE REGION	C	LAND RESOURCE REGION	C
WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE	WATER SOURCE	GROUND AND SURFACE	WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	62 PPM	62 PPM	TOTAL HARDNESS	62 PPM	TOTAL HARDNESS	62 PPM
NON-CARBOHYDRATE HARDNESS	0 PPM	0 PPM	NON-CARBOHYDRATE HARDNESS	0 PPM	NON-CARBOHYDRATE HARDNESS	0 PPM
FLOODING STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	FLOODING STATUS	NO ARTIFICIAL, LOW NATURAL	FLOODING STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	15606	14932	2439	2370	19963	19306	6057	5925	17924	17031	6962	6874
1-4	62104	59711	8556	8402	78228	75640	22122	21991	64609	62302	26246	26038
5-9	59351	57769	7564	7639	90188	87038	22176	22049	87398	84413	34764	34577
10-14	44048	43269	6009	5842	80159	78296	16720	17241	89500	86736	32504	33054
15-19	41346	40387	5430	6151	59770	63273	11585	13223	86575	87784	27131	28635
20-24	56405	61442	7750	9772	55121	61791	13995	16681	91494	97612	25249	30222
25-29	71957	78322	11636	12925	65379	63435	17838	18174	83249	81798	25447	28141
30-34	70954	75743	10880	11576	72901	72292	17293	18396	67820	64798	22541	23447
35-39	70617	75765	10721	11147	77617	81510	17187	17814	63860	60906	19666	20977
40-44	65357	69715	9143	8185	72234	75322	13923	14763	67623	68783	17907	20305
45-49	61361	64738	7576	6667	68546	71604	12457	12483	70225	75052	17199	19013
50-54	56526	61259	5424	5665	59899	64766	9833	9570	63536	68715	13986	16157
55-59	48346	54602	3536	3605	54126	60240	8026	8193	56390	62608	11616	13530
60-64	40967	48304	2983	2759	44957	54858	5302	5855	45761	54214	9341	10621
65-69	32013	41357	2375	2488	37633	49350	3714	4780	34666	47960	6911	8807
70-74	20820	29664	1340	1216	28112	39273	2829	3065	25670	40481	4351	5990
75-79*	18201	29263	943	1033	17021	26198	1772	1905	17426	29844	2365	3731
80-84*	0	0	0	0	8133	14686	781	818	9919	19442	1449	2106
85-UP	2837	5615	177	261	4103	8849	427	544	6224	13252	1120	1681
TOTALS	839216	919557	104482	107103	994081	1067727	203737	213470	1049869	1123731	306755	335706
GRAND TOTAL			1970358				2479015					2816061

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR PERIODS THE 10 YEAR PERIODS 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	1950 RANK BY POPULATION	CALIFORNIA	
TOTAL	21070	21056	42126	75571	28058	27480	27327	82865	1950 POP./SQ. MILE	4370		
CV-RENAL	11454	11827	23281	41613	13249	16390	14612	43334	1970 POP./SQ. MILE	6073		
HEART	7918	8240	16158	29280	9817	10253	10134	30966	1949 MED. FAM. INCOME	3575		
NON CV-R	9616	9229	18845	11254	11093	11611	10549	39531	1969 MED. FAM. INCOME	10535		
CANCER	3400	3390	6790	4315	4180	4287	4726	14432	URBAN CLASS	CENTRAL		
									1950 URBAN AREA RANK	3		
									JAN MEAN TEMPERATURE	55		
									JULY MEAN TEMPERATURE	72		
									MEAN ANN. PRECIPITATION	14		
									LAND RESOURCE REGION	C		
									WATER SOURCE			
									TOTAL HARDNESS	125 PPM		
									NON-CARBONATE HARDNESS	17 PPM		
									FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	295	301	1	0	396	406	14	13	406	406	14	13
1-4	1237	1214	2	0	1115	1076	3	9	1531	1531	51	52
5-9	1207	1232	0	1	1306	1185	4	4	1927	1834	43	51
10-14	880	827	0	1	1370	1382	6	2	1752	1654	32	38
15-19	669	801	0	1	1161	1258	4	0	1511	1619	31	30
20-24	708	916	4	0	1076	1142	4	4	1598	1930	92	68
25-29	1153	1343	1	3	1021	886	7	7	1579	1590	80	60
30-34	1288	1365	1	2	836	896	5	3	1250	1155	38	36
35-39	1246	1211	2	2	1047	1264	2	5	1056	954	28	29
40-44	1032	963	2	2	1170	1331	4	2	990	1121	18	24
45-49	805	779	0	1	1299	1361	1	3	1246	1412	16	17
50-54	581	616	2	2	1084	1102	2	4	1302	1592	11	19
55-59	481	477	0	0	861	866	0	5	1318	1424	18	10
60-64	348	412	0	0	571	668	0	1	1057	1159	9	5
65-69	279	295	0	0	437	529	1	1	712	886	2	7
70-74	187	228	1	0	296	406	0	1	403	639	1	5
75-79*	139	204	0	0	167	277	0	0	260	508	4	2
80-84*	0	0	0	0	106	140	0	0	153	407	3	4
85-UP	29	45	0	1	49	84	0	0	139	329	1	4
TOTALS	12564	13229	15	15	15314	16202	43	55	20237	22150	492	474
GRAND TOTAL				25823				31614				43953

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	326.6	791.0	0.971		326.6	791.0	0.971		326.6	791.0	0.971	
CV-RENAL	192.0	465.0	1.054		192.0	465.0	1.054		192.0	465.0	1.054	
HEART	123.0	339.0	1.063		123.0	339.0	1.063		123.0	339.0	1.063	
NON CV-R	134.0	326.0	0.873		134.0	326.0	0.873		134.0	326.0	0.873	
CANCER	54.0	139.0	1.017		54.0	139.0	1.017		54.0	139.0	1.017	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	CALIFORNIA		
TOTAL	145	161	326	791	385	365	383	1133	1950 RANK BY POPULATION	468		
CV-RENAL	98	94	192	465	219	212	220	651	1950 POP/100 MILE	7595		
HEART	59	64	123	339	140	144	148	432	1970 POP/100 MILE	8671		
NON CV-R	67	67	134	326	166	153	163	482	1949 POP/100 MILE	3949		
CANCER	28	26	54	139	58	51	49	158	1969 MED. FAM. INCOME	10888		
									URBAN CLASS	FRINGE		
									1950 URBAN AREA RANK	3		
									JAN MEAN TEMPERATURE	53		
									JULY MEAN TEMPERATURE	67		
									MEAN ANN. PRECIPITATION	12		
									LAND RESOURCE REGION	C		
									WATER SOURCE	GROUND		
									TOTAL HARDNESS	239 PPM		
									NON-CARBONATE HARDNESS	38 PPM		
									FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NE	WM	WF	WM	WF	NM	NE	WM	WF	WM	WF	NM	NE	WM	WF
IT 1	2932	2788	770	695	2436	2284	1380	1296	1413	1347	1471	1482	1471	1347	1471	1482	1471	1347
1-4	11784	11260	2472	2555	8290	8192	5365	5528	4910	4657	5765	5498	4910	4657	5765	5498	4910	4657
5-9	10585	10339	2021	2159	8877	8736	6383	6277	5964	5542	8337	8315	5964	5542	8337	8315	5964	5542
10-14	7967	8185	1778	1632	9178	9018	5040	4984	5806	5427	8305	8344	5806	5427	8305	8344	5806	5427
15-19	8106	8607	1610	1689	7366	8885	2818	3314	6272	7105	7390	7588	6272	7105	7390	7588	6272	7105
20-24	11040	12102	2198	2540	7598	8632	2454	3059	11830	11218	6207	7469	11830	11218	6207	7469	11830	11218
25-29	13681	14302	3344	3412	7750	7038	2700	3385	9073	7735	4977	5847	9073	7735	4977	5847	9073	7735
30-34	12862	13350	2959	3192	7516	7335	3198	4031	5885	4891	4234	4614	5885	4891	4234	4614	5885	4891
35-39	12885	13797	2986	2872	8070	8845	3875	4366	4797	4238	3620	4314	4797	4238	3620	4314	4797	4238
40-44	12407	13041	2568	1972	8247	9466	3374	3599	5194	5205	3967	4597	5194	5205	3967	4597	5194	5205
45-49	11672	11475	2003	1477	9278	10769	3123	2920	6190	6794	5214	4690	6190	6794	5214	4690	6190	6794
50-54	10870	11171	1423	953	9357	10216	2491	2175	6507	9265	3633	3866	6507	9265	3633	3866	6507	9265
55-59	9671	10082	853	673	9269	9535	2091	1708	6720	7265	3318	2717	6720	7265	3318	2717	6720	7265
60-64	8468	9281	454	508	6592	8219	1283	1493	5995	7680	2381	2174	5995	7680	2381	2174	5995	7680
65-69	4483	5070	238	195	5149	6558	505	551	4026	6352	1778	1662	4026	6352	1778	1662	4026	6352
70-74	4383	5070	238	195	5149	6558	505	551	4026	6352	1778	1662	4026	6352	1778	1662	4026	6352
75-79*	3545	5560	184	188	3437	4909	323	327	2908	5095	504	591	2908	5095	504	591	2908	5095
80-84*	609	1039	31	47	1652	2802	110	168	1754	3504	433	456	1754	3504	433	456	1754	3504
85-UP					760	1698	70	97	1168	2519	310	324	1168	2519	310	324	1168	2519
TOTALS	159640	169157	28480	27298	128088	142435	47361	49664	101911	111601	71782	76267	101911	111601	71782	76267	101911	111601
GRAND TOTAL				384575				367548				361561						

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	49-50 SUM	1959	1960	59-61 SUM	1969	1970	1971	SUM	69-71 SUM	STATE
TOTAL	4286	4102	8388	4352	4541	13293	4546	4287	4352	13185	1950 RANK BY POPULATION	CALIFORNIA
CV-PENAL	2382	2321	4703	2453	2549	7432	2376	2245	2317	6938	1950 POP/SQ. MILE	27
HEART	1798	1739	3537	1762	1884	7170	1728	1636	1712	5076	1970 POP/SQ. MILE	7256
NON CV-R	1904	1781	3685	1899	1992	5661	2170	2042	2035	6247	1949 MED. FAM. INCOME	3820
CANCER	652	653	1305	681	714	2142	820	760	752	2332	1969 MED. FAM. INCOME	9628
											URBAN CLASS	CENTRAL
											1950 URBAN AREA RANK	47
											JAN MEAN TEMPERATURE	62
											MAY MEAN TEMPERATURE	62
											ANNUAL PRECIPITATION	17
											WATER RESOURCES REGION	C
											WATER SOURCE	SURFACE
											TOTAL HARDNESS	26 PPM
											NON-CARBONATE HARDNESS	2 PPM
											FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT 1	223	235	9	18
1-4	920	514	31	28
5-9	946	971	18	34
10-14	732	665	27	28
15-19	15-19	560	34	37
20-24	828	751	45	49
25-29	1008	1033	62	65
30-34	939	1021	44	45
35-39	924	1019	42	45
40-44	794	997	22	32
45-49	718	787	26	34
50-54	632	821	29	38
55-59	533	762	14	23
60-64	467	710	20	14
65-69	424	693	19	10
70-74	313	498	8	8
75-79	295	562	9	5
80-84	0	0	0	0
85-UP	51	124	0	1
TOTALS	11375	13123	459	518
GRAND TOTAL	25875			

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959	1961
TOTAL	239	250	390	415
CV-HEART	132	147	279	285
CV-REAR	89	97	136	149
NON CV-R	107	103	184	178
CANCER	38	38	72	69
			72	72
			1961	1961
			SUM	SUM
			59-61	59-61

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1959-77
TOTAL			
OBSERVED	499.0	1191.0	1405.0
EXPECTED*	567.4	1480.4	1857.0
OBS/EXP	0.862	0.805	0.757
CV-RENAL			
OBSERVED	279.0	645.0	744.0
EXPECTED*	328.7	842.5	1106.3
OBS/EXP	0.849	0.766	0.673
HEART			
OBSERVED	186.0	426.0	473.0
EXPECTED*	230.7	589.4	765.9
OBS/EXP	0.806	0.723	0.618
NON CV-R			
OBSERVED	210.0	546.0	661.0
EXPECTED*	239.8	871.8	1050.0
OBS/EXP	0.879	0.626	0.628
CANCER			
OBSERVED	10.0	10.0	10.0
EXPECTED*	10.0	10.0	10.0
OBS/EXP	1.000	1.000	1.000

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE
STATE	CALIFORNIA
1950 RANK BY POPULATION	473
1950 POP./SQ. MILE	3802
1970 POP./SQ. MILE	2221
1949 MED. FAM. INCOME	4657
1969 MED. FAM. INCOME	15036
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	7
JAN MEAN TEMPERATURE	45
JULY MEAN TEMPERATURE	64
MEAN ANNUAL PRECIPITATION	19
LAND RESOURCE REGION	C
WATER SOURCE	GROUND AND
TOTAL HARDNESS	99 PPM
NON-CARBONATE HARDNESS	12 PPM
FLUORIDATION STATUS	FLOUORIDATED

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	WM	WF	MF	WM	WF	MF	WM	WF	MF	WM	WF	MF	WM	WF	MF	WM	WF	MF
TOTALS	41779	53020	4645	5133	44205	54235	8584	9423	41359	49087	10790	12091	113327					
GRAND TOTAL				104577				116407										
1-4	698	636	117	105	720	718	268	255	629	618	251	235						
5-9	2571	2316	390	352	2755	2661	956	945	2229	2073	921	901						
10-14	2776	2744	371	395	3214	3192	966	991	2803	2679	1277	1202						
15-19	2665	2185	301	295	3131	3184	755	801	2973	2795	1196	1221						
20-24	2356	2491	295	364	2945	3066	566	663	3282	3310	1037	1081						
25-29	3114	3065	349	394	3121	2954	607	691	3960	3934	895	1168						
30-34	3256	3414	419	471	2825	2401	611	695	3371	3102	887	936						
35-39	2927	3284	402	429	2570	2537	622	672	2431	2150	703	712						
40-44	2936	3336	393	466	2684	3162	609	730	2029	1971	562	679						
45-49	2940	3438	376	363	2684	3161	588	637	2229	2397	595	672						
50-54	2831	3473	296	330	2880	3419	486	534	2452	2876	538	641						
55-59	2789	3830	267	308	2908	3502	379	447	2408	3042	530	624						
60-64	2594	3794	184	242	2814	3638	378	374	2540	3168	436	510						
65-69	2220	3543	144	181	2241	3714	245	311	2299	3076	326	461						
70-74	2140	3655	163	162	2137	3609	181	300	1927	3054	255	374						
75-79*	1506	3458	95	114	1760	3437	158	176	1430	2920	214	273						
80-84*	1759	3532	72	113	1335	2792	108	99	1135	2608	105	216						
85-89*	0	0	0	0	689	1699	35	65	712	1808	86	95						
TOTALS	41779	53020	4645	5133	44205	54235	8584	9423	41359	49087	10790	12091						
GRAND TOTAL				104577				116407				113327						

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	1949-50			1959-61			1969-71		
	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*
CV-RENAL									
HEART									
NON CV-R									
CANCER									

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	CALIFORNIA		
1950 RANK BY POPULATION	101		
1950 POP/SQ. MILE	4910		
1970 POP/SQ. MILE	4992		
1949 MED. FAM. INCOME	3676		
1969 MED. FAM. INCOME	10825		
URBAN CLASS	FRINGE		
1950 URBAN AREA RANK	3		
JAN MEAN TEMPERATURE	52		
JULY MEAN TEMPERATURE	72		
MEAN ANN. PRECIPITATION	19		
LAND RESOURCE REGION	C		
WATER SOURCE	GROUND AND SURFACE		
TOTAL HARDNESS	126 PPM		
NON-CARBONATE HARDNESS	5 PPM		
FLUORIDATION STATUS	NO ARTIFICIAL, OPTIMUM NATURAL		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	332	357	5	5	807	761	27	19	659	587	135	172
1-4	1362	1470	9	8	3152	3154	70	79	2609	2508	668	620
5-9	1461	1424	10	20	3787	3582	77	87	3774	3661	965	1039
10-14	1206	1284	12	15	3118	3254	49	61	3822	3656	967	959
15-19	1155	1155	15	15	2889	2359	38	34	3441	3443	683	675
20-24	1029	1217	12	9	1628	2017	67	44	3607	3734	448	421
25-29	1252	1352	13	11	2134	2162	45	53	2717	2836	380	452
30-34	1322	1470	13	17	2325	2403	46	57	2727	2836	380	452
35-39	1309	1417	13	14	2503	2534	38	37	1851	1850	322	408
40-44	1149	1240	13	10	2503	2534	38	37	1851	1850	322	408
45-49	1088	1058	13	4	1889	1612	35	25	1953	2052	300	309
50-54	1088	1058	13	4	1889	1612	35	25	2029	2213	203	225
55-59	782	944	3	4	1154	1342	25	16	1901	2146	164	144
60-64	718	863	3	2	927	1212	25	13	1693	1806	99	111
65-69	589	835	1	2	896	1211	7	5	1284	1449	82	95
70-74	479	688	3	3	732	973	9	6	949	1328	57	63
75-79	496	697	3	3	462	723	4	2	696	1247	32	42
80-84	0	0	0	0	257	457	2	6	565	1023	11	28
85-UP	98	161	0	0	138	253	1	2	314	650	13	16
TOTALS	16460	18658	130	157	31936	34040	596	595	36448	38492	6062	6382
GRAND TOTAL				35405				67157				87384

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	777.0	1597.0	0.487		777.0	1597.0	0.487		777.0	1597.0	0.487	
CV-RENAL	430.0	898.0	0.479		430.0	898.0	0.479		430.0	898.0	0.479	
HEART	284.0	591.0	0.480		284.0	591.0	0.480		284.0	591.0	0.480	
NON CV-R	347.0	699.0	0.497		347.0	699.0	0.497		347.0	699.0	0.497	
CANCER	135.0	271.0	0.498		135.0	271.0	0.498		135.0	271.0	0.498	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	CALIFORNIA		
1950 RANK BY POPULATION	343		
1950 POP/SQ. MILE	2584		
1970 POP/SQ. MILE	3867		
1949 MED. FAM. INCOME	3347		
1969 MED. FAM. INCOME	10014		
URBAN CLASS	INDEPENDENT		
1950 URBAN AREA RANK	-		
JAN MEAN TEMPERATURE	49		
JULY MEAN TEMPERATURE	73		
MEAN ANNUAL PRECIPITATION	18		
LAND RESOURCE REGION	0		
WATER SOURCE	GROUND AND SURFACE		
TOTAL HARDNESS	175 PPM		
NON-CARBONATE HARDNESS	29 PPM		
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960			1970		
	WM	WM	NP	WM	WM	NP	WM	WM	NP
LT 1	268	273	2	636	560	8	623	553	18
1-4	1198	1187	14	2484	2271	17	2135	2028	49
5-9	1262	1233	5	2579	2599	26	2769	2708	61
10-14	982	930	60	2205	2129	16	2784	2550	62
15-19	721	800	5	1613	1668	8	2321	2391	51
20-24	740	791	13	1363	1596	13	2290	2893	52
25-29	966	1152	7	1778	1768	15	2741	2626	49
30-34	1089	1153	11	1771	1678	11	1925	1804	47
35-39	892	1030	9	1769	1811	16	1605	1547	35
40-44	830	788	7	1634	1638	17	1590	1703	38
45-49	684	740	2	1411	1317	11	1686	1667	28
50-54	530	550	5	1024	1050	7	1359	1475	22
55-59	450	561	2	831	769	12	1094	1127	17
60-64	419	493	1	630	713	2	722	863	9
65-69	384	420	6	468	730	0	450	647	3
70-74	270	344	2	412	544	3	345	569	8
75-79#	258	373	1	285	382	4	237	475	0
80-84#	0	0	0	129	204	0	125	300	4
85-89	40	63	0	67	136	0	90	137	3
TOTALS	12243	12749	152	23069	23558	196	26891	28063	547
GRAND TOTAL			82			163			574
			25226			46986			56075

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	477.0	1093.0	1289.0
EXPECTED*	435.9	1077.1	1212.5
OBS/EXP	1.094	1.015	1.063
CV-RENAL			
OBSERVED	268.0	576.0	661.0
EXPECTED*	240.9	570.6	641.7
OBS/EXP	1.112	1.009	1.030
HEART			
OBSERVED	182.0	414.0	479.0
EXPECTED*	171.5	406.8	455.9
OBS/EXP	1.061	1.018	1.051
NON CV-R			
OBSERVED	209.0	517.0	628.0
EXPECTED*	195.0	506.5	570.8
OBS/EXP	1.072	1.021	1.100
CANCER			
OBSERVED	77.0	172.0	242.0
EXPECTED*	68.9	167.4	189.7
OBS/EXP	1.117	1.028	1.275

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUB	1959	1960	1961	59-61 SUB	1969	1970	1971	69-71 SUB
TOTAL	223	254	477	328	379	386	1093	416	423	450	1289
CV-RENAL	123	145	268	175	188	213	576	203	231	227	661
HEART	91	91	182	124	141	149	414	153	175	151	479
NON CV-R	100	109	209	153	191	173	517	213	192	223	628
CANCER	33	44	77	57	61	54	172	75	75	97	242

CITY CHARACTERISTICS

STATE	CALIFORNIA
1950 BANK BY POPULATION	476
1950 POP/50. MILE	4204
1970 POP/50. MILE	9346
1949 MED. INCOME	3525
1969 MED. INCOME	11140
URBAN CLASS	FRNGE
1950 URBAN AREA RANK	3
JAN MEAN TEMPERATURE	54
JULY MEAN TEMPERATURE	70
MEAN ANN. PRECIPITATION	12
LAND RESOURCE REGION	C
WATER SOURCE	GROUND AND SURFACE
TOTAL HALFDNESS	174 PPM
NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

REDWOOD CITY
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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	279	291	13	11	505	469	17	18	458	416	29	21
1-4	1171	1150	24	25	1891	1961	54	65	1699	1501	83	93
5-9	1065	1053	23	30	2352	2231	57	61	2109	1986	95	94
10-14	793	780	28	18	2176	2155	33	54	2096	2068	61	84
15-19	635	716	25	19	1351	1575	37	36	2215	2178	85	96
20-24	695	776	25	26	1251	1326	34	35	2434	2900	130	127
25-29	1078	1102	43	42	1262	1298	44	42	2368	2211	129	118
30-34	1052	1116	41	33	1465	1573	47	46	1742	1458	118	85
35-39	1020	1139	24	24	1954	2025	61	58	1327	1274	84	68
40-44	976	1009	22	24	1758	1802	35	33	1441	1630	60	62
45-49	846	795	24	19	1527	1577	23	30	1961	2052	60	55
50-54	733	605	19	15	1249	1271	23	23	1757	1893	48	57
55-59	565	593	17	11	1018	1004	32	18	1461	1681	36	36
60-64	479	479	11	4	773	810	12	16	1144	1269	24	29
65-69	384	381	3	6	556	564	5	12	716	960	25	28
70-74	253	310	3	3	502	550	10	7	532	447	16	13
75-79	213	223	3	2	381	418	6	3	381	376	6	5
80-84	10	0	0	0	137	168	8	3	402	371	5	5
85-UP	22	52	0	0	77	103	2	2	100	241	7	2
TOTALS	12265	12620	345	314	22119	23079	538	554	26093	27402	1101	1090
GRAND TOTAL				25544				46290				55686

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	476.0	413.4	1.151		1198.0	1167.7	1.026		1562.0	1593.2	0.980	
CV-RENAL												
OBSERVED	283.0				620.0				770.0			
EXPECTED*	217.3				630.5				898.4			
OBS/EXP	1.302				0.983				0.857			
HEART												
OBSERVED	188.0				446.0				532.0			
EXPECTED*	157.6				452.8				637.6			
OBS/EXP	1.193				0.985				0.834			
NON CV-R												
OBSERVED	193.0				578.0				792.0			
EXPECTED*	196.1				537.3				694.8			
OBS/EXP	0.984				1.076				1.140			
CANCER												
OBSERVED	84.0				233.0				315.0			
EXPECTED*	68.2				190.2				256.5			
OBS/EXP	1.231				1.225				1.228			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	1959	1961	1969	1970	1971	69-71 SUM	STATE	CALIFORNIA		
TOTAL	239	237	373	429	518	549	495	1562	1950 RANK BY POPULATION	471		
CV-RENAL	152	131	208	215	281	281	247	770	1950 POP/SQ. MILE	3452		
HEART	93	95	188	146	166	198	168	532	1970 POP/SQ. MILE	2716		
NON CV-R	87	106	165	199	276	268	248	792	1949 MED. FAM. INCOME	4044		
CANCER	40	44	72	90	115	101	99	315	1969 MED. FAM. INCOME	12094		
									URBAN CLASS	FRINGE		
									1950 URBAN AREA RANK	7		
									JAN MEAN TEMPERATURE	45		
									JULY MEAN TEMPERATURE	64		
									MEAN ANN. PRECIPITATION	19		
									LAND RESOURCE REGION	C		
									WATER SOURCE			
									TOTAL HARDNESS			
									NON-CARBOONATE HARDNESS	8 PPM		
									FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL		

1960	NP	RM	NP	RM
672	664	239	211	
2273	2310	919	954	
2613	2596	1121	1021	
2702	2625	1000	1192	
1947	2235	621	684	
1607	1711	321	478	
1652	1688	393	483	
1881	1874	449	581	
2071	2243	582	725	
2112	2229	555	559	
2069	2018	479	451	
1642	1570	367	298	
1356	1286	273	221	
1054	1055	153	99	
842	895	92	99	
591	695	43	44	
372	434	29	27	
143	215	8	6	
60	104	6	5	
27659	28407	7650	8138	
			1854	

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

	1969	1970	1971	69-71 SUM
1	701	698	680	2079
2	354	328	324	1006
3	245	225	211	681
4	370	370	356	1073
5	133	139	126	398
6	247	243	243	733
7	134	134	134	398
8	134	134	134	398
9	134	134	134	398
10	134	134	134	398
11	134	134	134	398
12	134	134	134	398
13	134	134	134	398
14	134	134	134	398
15	134	134	134	398
16	134	134	134	398
17	134	134	134	398
18	134	134	134	398
19	134	134	134	398
20	134	134	134	398
21	134	134	134	398
22	134	134	134	398
23	134	134	134	398
24	134	134	134	398
25	134	134	134	398
26	134	134	134	398
27	134	134	134	398
28	134	134	134	398
29	134	134	134	398
30	134	134	134	398
31	134	134	134	398
32	134	134	134	398
33	134	134	134	398
34	134	134	134	398
35	134	134	134	398
36	134	134	134	398
37	134	134	134	398
38	134	134	134	398
39	134	134	134	398
40	134	134	134	398
41	134	134	134	398
42	134	134	134	398
43	134	134	134	398
44	134	134	134	398
45	134	134	134	398
46	134	134	134	398
47	134	134	134	398
48	134	134	134	398
49	134	134	134	398
50	134	134	134	398
51	134	134	134	398
52	134	134	134	398
53	134	134	134	398
54	134	134	134	398
55	134	134	134	398
56	134	134	134	398
57	134	134	134	398
58	134	134	134	398
59	134	134	134	398
60	134	134	134	398
61	134	134	134	398
62	134	134	134	398
63	134	134	134	398
64	134	134	134	398
65	134	134	134	398
66	134	134	134	398
67	134	134	134	398
68	134	134	134	398
69	134	134	134	398
70	134	134	134	398
71	134	134	134	398
72	134	134	134	398
73	134	134	134	398
74	134	134	134	398
75	134	134	134	398
76	134	134	134	398
77	134	134	134	398
78	134	134	134	398
79	134	134	134	398
80	134	134	134	398
81	134	134	134	398
82	134	134	134	398
83	134	134	134	398
84	134	134	134	398
85	134	134	134	398
86	134	134	134	398
87	134	134	134	398
88	134	134	134	398
89	134	134	134	398
90	134	134	134	398
91	134	134	134	398
92	134	134	134	398
93	134	134	134	398
94	134	134	134	398
95	134	134	134	398
96	134	134	134	398
97	134	134	134	398
98	134	134	134	398
99	134	134	134	398
100	134	134	134	398

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE
STATE	CALIFORNIA
1950 BANK BY POPULATION	108
1950 POP/50. MILE	6865
1970 POP/50. MILE	2462
1949 MED. FAM. INCOME	3536
1969 MED. FAM. INCOME	10363
URBAN CLASS	PRINCE
1950 URBAN AREA RANK	7
JAN MEAN TEMPERATURE	47
JULY MEAN TEMPERATURE	62
MEAN ANN. PRECIPITATION	17
LAND RESOURCE REGION	C
WATER SOURCE	SURFACE
TOTAL HARDNESS	26 PPM
NON-CARBONATE HARDNESS	2 PPM
FLUORIDATION STATUS	NO ARTIFICIAL ION NATURAL

POPULATION

BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT 1	1201	1049	160	153
1-4	4577	4560	454	486
5-9	4168	4203	353	310
10-14	3239	3144	383	311
15-19	2915	2530	353	293
20-24	3786	4785	434	412
25-29	5056	5497	660	639
30-34	5086	5157	512	481
35-39	5008	5419	490	380
40-44	4902	4923	372	399
45-49	4678	4493	387	267
50-54	4426	4158	284	267
55-59	3892	3488	213	168
60-64	3434	3146	206	161
65-69	2693	2765	177	62
70-74	1734	1855	114	32
75-79#	1462	1867	62	37
80-84#		0	0	0
85-UP	218	374	10	10
TOTALS	62475	64414	5624	5059
GRAND TOTAL				137572

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

	CAUSE	1949	1950	49-50 SUR	1959	1960	1961	59-61 SUM	1969	1970	1971	SUM
TOTAL		1889	1781	3670	2286	2496	2539	7321	3053	3053	3065	9171
CY-BENAL		1051	904	2035	1251	1287	1358	3876	1609	1572	1590	4771
HEART		760	709	1469	950	987	1036	3040	1176	1112	1184	3472
NON CV-R		838	757	1635	1035	1209	1201	3445	1444	1481	1475	4400
CANCER		252	221	473	361	417	386	1164	543	535	564	1642

CITY CHARACTERISTICS

STATE	CALIFORNIA
1950 RANK BY POPULATION	67
1950 POP./SQ. MILE	8140
1970 POP./SQ. MILE	2742
1949 MED. FAM. INCOME	4106
1949 MED. FAM. INCOME	9715
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	59
JAN MEAN TEMPERATURE	45
JULY MEAN TEMPERATURE	75
MEAN ANN. PRECIPITATION	16
LAND RESOURCE	C
WATER RESOURCE	
TOTAL HAPNESS	GROUND AND SURFACE
NON-CARBONATE HARDNESS	21 PPM
FLUORIDATION STATUS	6 PPM
	NO ARTIFICIAL LOW NATURAL

BY AGE, RACE, SEX AND CENSUS YEAR

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

LAND RESOURCE REGION	GROUND AND SURFACE
WATER	133 PPM
TOTAL HARDNESS	
NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	NO ARTIFICIAL OPTIMUM NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	NP	NM	NP	WM	NP	NM	NP	WM	NP	NM	NP
IT 1	5500	5470	1157	1148	4797	4551	1916	1861	3038	2920	1880	1803
IT 4	21575	20718	3823	3530	16002	15567	7050	7087	9910	9436	7212	6804
5-9	18488	18250	2659	2588	17611	17003	8002	7718	12637	12141	9944	9610
10-14	14710	14738	2395	2116	17736	17507	6363	6209	12769	12460	10023	9980
15-19	19671	15682	2580	2310	18069	16571	3650	3790	15088	15322	9555	9607
20-24	27041	24573	3867	4234	20025	20076	4123	4851	26252	28397	9286	10999
25-29	29115	30376	5198	4927	20055	18479	4994	5345	24072	23045	7516	8222
30-34	26890	28469	4245	3973	19635	18116	5331	6271	16584	14190	6998	7072
35-39	27495	30357	4515	3426	19762	20623	5785	5878	14018	11729	6238	6634
40-44	27465	29654	4198	2402	18423	21497	4613	4555	14464	13528	6094	7292
45-49	27183	26982	3564	1795	20750	23910	4610	3734	15467	16383	6260	6430
50-54	25763	25199	2612	1242	21433	24330	4396	2712	14594	17470	4899	5135
55-59	22134	21546	1734	881	21400	22888	3600	2114	15559	18843	4462	4194
60-64	19342	18579	1194	609	18647	20777	2529	1321	14951	18993	4281	3246
65-69	14863	15890	835	410	15227	18164	1587	991	12483	16704	3204	2505
70-74	9425	10925	470	229	11579	13989	939	568	9771	14260	1937	1583
75-79*	7362	10273	321	172	7088	9333	578	316	6583	10465	987	975
80-84*	0	0	0	0	3358	5093	221	128	3621	6379	471	490
85-UP	1008	1777	49	41	1445	2827	95	82	2245	4415	327	333
TOTALS	344430	349458	45436	36033	293042	311361	70382	65531	244106	267080	101574	102914
GRAND TOTAL				775357				740316				715674

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL				TOTAL				TOTAL			
CV-RENAL	OBSERVED				OBSERVED				OBSERVED			
	18853.0				29274.0				27906.0			
	EXPECTED*				15611.0				27478.3			
CV-RENAL	OBS/EXP				1.208				1.065			
	OBSERVED				10218.0				15539.0			
	EXPECTED*				8536.6				15572.3			
HEART	OBS/EXP				1.197				0.998			
	OBSERVED				7612.0				11244.0			
	EXPECTED*				6148.5				11031.2			
MON CV-R	OBS/EXP				1.238				1.019			
	OBSERVED				8635.0				13735.0			
	EXPECTED*				7074.4				11906.0			
CANCER	OBS/EXP				1.221				1.154			
	OBSERVED				2838.0				5072.0			
	EXPECTED*				2601.0				4439.0			
CANCER	OBS/EXP				1.091				1.143			
	OBSERVED				5192.0				5192.0			
	EXPECTED*				4451.3				4451.3			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	1959	1960	1961	1969	1970	1971	STATE	1950 BANK BY POPULATION	CALIFORNIA	1971
TOTAL	9559	9294	9603	9867	9804	9580	9384	8942	1950 POP/50. MILE	17385	17385	17385
CV-RENAL	5145	5073	5138	5250	5151	4813	4634	4410	1970 POP/50. MILE	15764	15764	15764
HEART	3855	3757	3728	3799	3717	3348	3305	3180	1949 MED. FAM. INCOME	3923	3923	3923
MON CV-R	4414	4221	4465	4617	4653	4767	4750	4532	1969 MED. FAM. INCOME	10503	10503	10503
CANCER	1369	1449	1646	1710	1716	1715	1784	1693	URBAN CLASS	CENTRAL	CENTRAL	CENTRAL
									1950 URBAN AREA RANK	7	7	7
									JAN MEAN TEMPERATURE	50	50	50
									JULY MEAN TEMPERATURE	58	58	58
									MEAN ANN. PRECIPITATION	20	20	20
									LAND RESOURCE REGION	C	C	C
									WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE
									TOTAL HARDNESS	58 PPM	58 PPM	58 PPM
									NON-CARBONATE HARDNESS	8 PPM	8 PPM	8 PPM
									FLUORIDATION STATUS	FLUORIDATED IN 1952	FLUORIDATED IN 1952	FLUORIDATED IN 1952

PCPULATION
BY AGE,FACE,SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	272	292	2	0	632	597	11	8	357	393	15	14
1-4	1253	1257	2	6	2724	2611	27	35	1535	1490	78	75
5-9	1151	1185	6	2	3783	3606	32	36	2443	2379	107	122
10-14	961	955	8	3	3546	3539	26	32	2992	3009	122	130
15-19	752	752	3	1	2082	2109	21	19	3202	3144	98	101
20-24	682	813	4	3	1213	1398	9	9	2418	2612	60	89
25-29	977	1136	3	6	1561	1628	20	31	1919	1839	67	74
30-34	1177	1306	7	5	2258	2676	27	43	1500	1590	69	87
35-39	1166	1261	4	3	2890	3144	20	28	1569	1632	93	104
40-44	1129	1167	1	5	2833	2761	21	18	2097	2432	76	90
45-49	982	920	0	2	2377	2237	17	11	2557	3007	52	59
50-54	823	882	1	2	1812	1768	11	4	2555	2850	22	31
55-59	695	640	0	4	1432	1432	10	19	2262	2350	22	21
60-64	692	526	2	1	1656	1193	8	3	1753	1753	12	15
65-69	382	426	2	1	1257	932	4	3	1463	1470	22	17
70-74	250	295	1	0	757	680	2	2	1141	1109	7	10
75-79	231	303	1	2	538	448	6	3	713	793	1	11
80-84	0	0	0	0	339	408	0	0	475	793	1	11
85-UP	28	60	0	0	138	205	0	0	233	431	2	5
					87	144	2	0	152	310	4	7
TOTALS	13323	14125	48	46	32078	33311	278	295	31979	34663	970	1086
GRAND TOTAL				27542				65962				68698

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	545.0	1440.0	2.191.0	442.2	1462.4	2.125.8	442.2	1462.4	2.125.8
	1.232	0.985	1.031						
CV-RENAL	297.0	793.0	1.119.0	236.8	774.3	1.225.6	236.8	774.3	1.225.6
	1.254	1.024	0.913						
HEART	228.0	599.0	831.0	171.3	561.0	876.7	171.3	561.0	876.7
	1.331	1.068	0.948						
NON CV-R	248.0	647.0	1072.0	205.4	688.1	900.2	205.4	688.1	900.2
	1.207	0.940	1.191						
CANCER	85.0	247.0	485.0	73.6	244.6	356.8	73.6	244.6	356.8
	1.156	1.010	1.359						

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM	
TOTAL	271	274	545	473	451	516	1440	750	718	723	2191	
CV-RENAL	139	158	297	261	254	278	793	387	354	387	1119	
HEART	104	124	228	193	194	212	599	287	268	276	831	
NON CV-R	132	116	248	212	197	238	647	372	364	336	1072	
CANCER	50	35	85	83	77	87	247	171	162	152	485	

CITY CHARACTERISTICS

STATE	CODE	
	CITY CHARACTERISTICS	CODE
CALIFORNIA		
1950 RANK BY POPULATION	448	
1950 POP./SQ. MILE	7062	
1970 POP./SQ. MILE	5409	
1949 MED. FAM. INCOME	4230	
1969 MED. FAM. INCOME	11938	
URBAN CLASS	FRINGE	
1950 URBAN AREA RANK	7	
JAN MEAN TEMPERATURE	47	
JULY MEAN TEMPERATURE	62	
MEAN ANN. PRECIPITATION	17	
LAND RESOURCE REGION	1	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	26	
NON-CARBONATE HARDNESS	26	
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NP
1	474	451	33	21
1-4	1986	1895	75	78
5-9	1722	1834	87	81
10-14	1167	1060	65	53
15-19	893	890	77	57
20-24	897	1128	69	90
25-29	1640	1892	117	113
30-34	1745	1922	116	113
35-39	1826	1967	96	82
40-44	1604	1665	64	66
45-49	1393	1316	53	61
50-54	1216	1161	60	49
55-59	890	978	38	35
60-64	722	785	38	32
65-69	534	668	21	24
70-74	358	389	21	10
75-79	248	364	8	0
80-84	0	0	0	0
85-UP	27	69	0	3
TOTALS	19332	20436	1038	976
GRAND TOTAL				41782

1960				
WM	WF	NH	NP	
654	611	48	39	
2723	2485	248	212	
3474	3426	259	272	
3149	3059	208	191	
2008	2112	133	125	
1213	1457	121	126	
1718	1846	163	173	
1575	1846	168	219	
2118	2386	249	227	
2695	2923	203	190	
2496	2702	152	134	
2422	2489	111	84	
1952	2009	102	103	
1563	1659	74	65	
1182	1346	44	51	
889	1215	37	29	
634	968	22	19	
394	620	11	6	
205	277	4	6	
76	150			
31422	33820	2357	2271	
			69870	

1970				
MM	WP	MM	NP	NP
925	494	69	58	
979	1884	251	239	
781	2784	334	359	
906	2857	401	369	
099	2976	370	365	
426	2945	288	303	
653	2792	257	258	
124	2020	217	272	
120	124	204	250	
809	1825	226	258	
809	1851	204	288	
097	2341	264	268	
449	2870	235	199	
350	2639	153	149	
216	2343	153	110	
684	1975	111	106	
175	1556	74	79	
793	1328	51	37	
555	1010	32	27	
315	625	20	27	
194	397	18	19	
030	37631	3575	3755	
			78991	

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-70
TOTAL			
OBSERVED	615.6	1562.0	2108.0
EXPECTED*	634.6	1773.9	2604.9
OBS/EXP	0.970	0.881	0.809
CV-CV-RENAL			
OBSERVED	336.0	821.0	1080.0
EXPECTED*	323.4	952.9	1512.3
OBS/EXP	1.039	0.862	0.714
HEART			
OBSERVED	225.0	578.0	774.0
EXPECTED*	234.7	684.0	1061.8
OBS/EXP	0.959	0.845	0.729
NON CV-R			
OBSERVED	279.0	741.0	1028.0
EXPECTED*	310.6	820.9	1092.6
OBS/EXP	0.898	0.903	0.941
CANCER			
OBSERVED	112.0	302.0	469.0
EXPECTED*	105.8	295.0	413.7
OBS/EXP	1.059	1.024	1.134

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

[illegible]

SANTA ANA
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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1T 1	461	429	4	4	1283	1233	42	55	1616	1547	134	137
1-4	1891	1883	37	22	5062	4838	187	186	6113	5855	585	543
5-9	1678	1714	26	19	5217	5054	143	133	6201	7853	785	713
10-14	1308	1361	27	20	4682	3966	175	180	4934	6645	661	655
15-19	1213	1257	14	14	3016	3385	113	111	4326	6653	492	498
20-24	1153	1456	2	3	3265	3200	118	151	6422	6953	492	503
25-29	1353	1353	18	32	3265	3200	118	151	5552	5764	448	529
30-34	1725	1801	20	29	3358	3676	95	107	4635	4278	448	467
35-39	1569	1691	24	29	3524	3606	90	87	4141	3948	355	406
40-44	1391	1543	15	16	2918	3044	81	99	3985	4215	272	309
45-49	1336	1467	13	16	2527	2587	64	62	4228	4230	221	204
50-54	1245	1449	13	13	2050	2257	50	53	3352	3515	142	168
55-59	1083	1327	10	7	1828	2171	44	20	2623	2892	118	130
60-64	986	1298	7	13	1493	2104	20	29	2010	2508	89	104
65-69	787	1173	10	7	1386	1880	17	20	1545	2099	50	62
70-74	603	876	3	3	1164	1661	18	11	1135	1937	36	43
75-79	592	925	0	1	688	1092	11	8	824	1391	10	19
80-84	0	0	0	0	344	667	1	2	472	971	19	23
85-UP	107	199	1	1	191	397	3	3	321	764	10	12
TOTALS	21150	23843	273	267	47097	50572	1276	1405	71183	74518	5329	5571
GRAND TOTAL				45533				100350				156601

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1029.0	1003.1	1.020		2556.0	2803.7	0.912		3421.0	3957.0	0.865	
CV-RENAL	573.0	589.6	0.980		1347.0	1557.5	0.865		1713.0	2189.5	0.782	
HEART	397.0	413.2	0.961		905.0	1098.9	0.824		1194.0	1527.1	0.782	
NON CV-R	456.0	424.5	1.074		1209.0	1246.2	0.970		1708.0	1767.5	0.966	
CANCER	148.0	161.1	0.919		406.0	431.0	0.942		579.0	583.9	0.992	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE
STATE		
1950 RANK BY POPULATION		CALIFORNIA
1950 POP./SQ. MILE		259
1970 POP./SQ. MILE		4216
1949 MED. FAM. INCOME		5800
1969 MED. FAM. INCOME		3376
URBAN CLASS.		10115
1950 URBAN AREA RANK		INDEPENDENT
JAN MEAN TEMPERATURE		-
JULY MEAN TEMPERATURE		48
MEAN ANNU. PRECIPITATION		77
LAND RESOURCE REGION		13
FAIR INDEX		C
WATER SOURCE		GROUND AND SURFACE
TOTAL HARDNESS		141 PPM
NON-CARBONATE HARDNESS		13 PPM
FLUORIDATION STATUS		NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE 1949-50 1959-61 1969-71

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	407	383	23	22	524	465	37	41	501	477	59	38
1-4	1519	1593	67	65	1878	1863	111	111	1649	1606	168	169
5-9	1436	1410	74	66	2359	2294	105	109	2152	2102	244	217
10-14	1166	1141	50	67	2172	2303	94	73	2152	2257	196	195
15-19	1090	1446	61	58	1664	1936	95	72	2352	2257	196	195
20-24	1651	1954	64	68	1508	1642	90	82	2487	3200	177	211
25-29	1782	1659	69	72	1494	1212	58	82	2484	2210	160	145
30-34	1437	1571	65	74	1872	1872	54	71	1566	1505	131	127
35-39	1443	1536	78	69	1848	1972	68	73	1373	1402	113	114
40-44	1294	1444	68	64	1634	1875	73	82	1588	1787	103	124
45-49	1164	1292	68	49	1628	1903	79	79	1879	2159	84	108
50-54	1164	1490	66	42	1543	1962	72	59	1686	2198	81	91
55-59	1095	1391	28	47	1450	1799	55	44	1649	2201	84	90
60-64	1045	1304	32	17	1256	1771	41	49	1541	2235	92	65
65-69	881	1144	29	24	1313	1842	26	34	1408	2149	51	65
70-74	593	904	19	14	1101	1591	22	18	1238	2029	51	59
75-79*	602	930	9	11	706	1107	11	15	944	1643	29	32
80-84#	0	0	0	0	330	706	6	10	545	1134	11	18
85-UP	95	214	2	5	184	391	3	6	383	810	11	13
TOTALS	20042	23193	860	818	26127	30420	1077	1144	30184	35880	2066	2085
GRAND TOTAL				44913				58768				70215

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM	69-71	1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	564	533	1097	2827	691	745	711	2207	952	967	988	2827
CV-RENAL	308	290	598	1603	402	401	430	1233	323	323	532	1603
HEART	213	203	429	1062	289	269	306	864	342	342	350	1062
NON CV-R	226	223	469	1226	269	314	289	872	429	425	376	1226
CANCER	103	88	191	489	131	118	128	377	169	170	150	489

CITY CHARACTERISTICS

STATE CALIFORNIA

1920 RANK BY POPULATION	265
1970 POP/SQ. MILE	3673
1949 MED. FAM. INCOME	3344
1949 MED. FAM. INCOME	3466
1969 MED. FAM. INCOME	3514
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	53
JULY MEAN TEMPERATURE	66
MEAN ANN. PRECIPITATION	17
LAND RESOURCE REGION	C
LAND RESOURCE	GROUND AND SURFACE
TOTAL HARDNESS	220 PPM
NON-CARBONATE HARDNESS	42 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, OPTIMUM NATURAL

CODE

STATE CALIFORNIA

1920 RANK BY POPULATION	265
1970 POP/SQ. MILE	3673
1949 MED. FAM. INCOME	3344
1949 MED. FAM. INCOME	3466
1969 MED. FAM. INCOME	3514
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	53
JULY MEAN TEMPERATURE	66
MEAN ANN. PRECIPITATION	17
LAND RESOURCE REGION	C
LAND RESOURCE	GROUND AND SURFACE
TOTAL HARDNESS	220 PPM
NON-CARBONATE HARDNESS	42 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, OPTIMUM NATURAL

SANTA MONICA
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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NE	NF		WM	WF	NM	NE	NF		WM	WF	NM	NE	NF	
LT 1	613	539	38	43	59		706	606	61	59		573	505	63	61			
1-4	2122	2130	163	142	240		2025	2004	273	240		1591	1619	218	271			
5-9	2148	2105	141	126	213		2113	2007	232	213		2021	1976	272	272			
10-14	1568	1536	129	109	188		2286	2288	188	171		2153	2043	293	261			
15-19	1511	1676	89	113	161		2207	2419	161	190		2399	2440	238	245			
20-24	2245	2572	123	164	221		2606	3054	221	194		3454	4433	248	322			
25-29	2976	3154	148	213	211		3066	2512	211	218		3886	3644	298	336			
30-34	2885	3055	184	201	195		2673	2359	216	195		2631	2237	264	227			
35-39	2768	2845	184	201	222		2591	2714	205	222		2122	1962	193	227			
40-44	2358	2657	179	154	200		2554	3604	155	200		2332	2373	184	284			
45-49	2094	2396	133	117	194		2703	3168	142	194		2495	2955	167	281			
50-54	2034	2379	87	72	145		2583	2940	129	145		2525	3164	138	134			
55-59	1708	2266	59	59	124		2124	2821	124	141		2438	3028	100	130			
60-64	1517	2131	58	60	68		1963	2592	42	68		2563	2810	100	123			
65-69	1246	1800	53	46	53		1573	2453	35	53		1957	2615	59	65			
70-74	915	1435	22	18	31		1179	1467	36	31		1257	2045	23	45			
75-79	790	1470	14	15	6		797	1407	36	6		953	2047	23	29			
80-84	137	255	0	3	9		413	803	7	9		536	1616	15	22			
85-89			0				225	440				377	903					
TOTALS	31615	36340	1794	1846	2602		36527	41595	2525	2602		37401	44534	3009	3345			
GRAND TOTAL				71595	83249					83249					88289			

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1627.0	1356.1	1.046	3109.0	3222.2	0.965	3580.0	4081.8	0.876
CV-RENAL	977.0	1907.0	0.513	1907.0	2102.0	0.907	2102.0	2537.0	0.831
HEART	655.0	630.3	1.055	1318.0	1336.3	0.986	1490.0	1744.1	0.854
NON CV-R	650.0	666.7	0.975	1202.0	1324.9	0.907	1478.0	1557.1	0.949
CANCER	266.0	254.2	1.046	470.0	517.1	0.909	599.0	610.6	0.981

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	59-61 SUM	1970	1971	1972	1973	69-71 SUM	STATE
TOTAL	795	832	1012	1066	1031	3109	1137	1231	1212	1231	3580	CALIFORNIA
CV-RENAL	461	516	624	647	636	1907	689	743	713	670	2102	1950 RANK BY POPULATION 164
HEART	307	358	411	446	461	1318	493	521	476	469	1490	1950 POP./SQ. MILE 8949
NON CV-R	334	316	388	419	395	1202	448	469	461	469	1478	1970 POP./SQ. MILE 10637
CANCER	136	130	149	169	152	470	155	198	198	246	599	1949 MED. FAM. INCOME 3677
												1969 MED. FAM. INCOME 10793
												URBAN CLASS FRINGS
												1950 URBAN AREA RANK 3
												JAN MEAN TEMPERATURE 55
												JULY MEAN TEMPERATURE 66
												MEAN ANN. PRECIPITATION 14
												LAND RESOURCE REGION C
												WATER SOURCE
												TOTAL HARDNESS 140 PPM
												NON-CARBONATE HARDNESS 16 PPM
												FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	MF	WM	WF	NM	NP	WM	WF	NM	NP
LT-1	522	454	1	2	476	508	5	5	574	566	16	14
1-4	2318	2047	2	2	1688	1722	9	6	1825	1856	53	36
5-9	2333	2242	2	2	1756	1753	9	9	1977	2115	47	55
10-14	1785	1638	3	1	2009	1836	7	2	1784	1774	46	47
15-19	1380	1452	0	0	1944	2088	6	3	1735	1908	44	37
20-24	1470	1704	3	3	1905	1896	15	6	2210	2572	67	65
25-29	2100	2422	1	1	1700	1452	16	11	2211	2005	52	45
30-34	2358	2670	2	5	1460	1417	5	7	1643	1443	55	36
35-39	2499	2528	2	1	1709	1930	4	2	1381	1197	33	36
40-44	2130	2089	2	1	1975	2394	6	6	1441	1429	25	22
45-49	1819	1719	1	0	2234	2473	6	2	1596	1890	24	25
50-54	1352	1378	0	0	1981	2101	6	2	1832	2253	12	12
55-59	1072	1125	0	2	1738	1794	2	0	1919	2306	22	17
60-64	726	876	0	0	1278	1350	1	0	1634	1944	14	11
65-69	573	716	1	1	891	1160	0	2	1210	1520	7	6
70-74	330	488	1	0	577	863	0	2	756	1107	6	5
75-79*	294	453	0	0	354	586	1	4	465	820	1	3
80-84*	0	0	0	0	151	276	0	0	232	468	1	2
85-UP	44	68	0	0	89	156	0	0	129	286	1	1
TOTALS	25005	26069	21	21	25915	27755	92	69	26454	29459	526	470
GRAND TOTAL				51116				53831				56909

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50			59-61			69-71		
	1949	1950	SUN	1959	1960	1961	1969	1970	SUN
TOTAL	339	338	677	476	484	522	642	587	646
CV-RENAL	189	201	390	291	283	308	351	322	381
HEART	143	139	282	202	212	236	244	230	274
NON CV-R	150	137	287	185	201	214	291	265	265
CANCER	61	62	123	79	70	90	120	114	126

CITY CHARACTERISTICS

CODE

STATE	CALIFORNIA
1950 RANK BY POPULATION	227
1950 POP./SQ. MILE	7302
1970 POP./SQ. MILE	7588
1949 MED. FAM. INCOME	4043
1969 MED. FAM. INCOME	9788
URBAN CLASS	FFINCE
1950 URBAN AREA RANK	3
JAN MEAN TEMPERATURE	53
JULY MEAN TEMPERATURE	67
MEAN ANN. PRECIPITATION	12
LAND RESOURCE REGION	C
WATER SOURCE	GROUND
TOTAL HARDNESS	213 PPM
NON-CARBONATE HARDNESS	23 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

1949-50 1959-61 1969-71

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	677.0	1482.0	0.457	1582.0	2017.8	0.784	1875.0	2017.8	0.929
CV-RENAL	390.0	882.0	0.442	882.0	1054.0	0.837	1054.0	1165.3	0.904
HEART	282.0	650.0	0.434	650.0	748.0	0.869	748.0	831.1	0.900
NON CV-R	287.0	600.0	0.478	600.0	821.0	0.732	821.0	852.4	0.963
CANCER	123.0	239.0	0.515	239.0	360.0	0.664	360.0	331.2	1.087

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	624	566	94	83	698	655	190	169	745	719	240	219
1-4	2337	2323	379	317	2733	2676	716	725	2737	2670	867	866
5-9	2299	2215	276	255	3329	3283	871	806	3738	3570	1243	1233
10-14	1648	1652	226	210	3022	3023	717	684	3731	3676	1302	1334
15-19	1641	1927	232	244	2361	2800	443	430	3871	4270	1190	1205
20-24	1916	2580	250	320	1876	2245	323	356	3608	4261	785	942
25-29	2612	2756	335	355	1932	1962	312	367	2917	2889	538	614
30-34	2365	2550	350	278	2151	2321	385	480	2183	2202	462	596
35-39	2550	2524	426	257	2488	2639	460	487	2003	2111	436	544
40-44	2301	2256	421	209	2246	2466	452	393	2250	2574	525	654
45-49	2162	2143	370	167	2344	2399	565	314	2447	2756	497	620
50-54	2091	1887	300	126	2123	2164	561	288	2318	2518	513	516
55-59	1917	1730	168	82	1941	1930	430	205	2157	2413	666	391
60-64	1683	1608	157	66	1739	1765	343	164	1907	2030	664	331
65-69	1335	1303	120	52	1608	1694	250	143	1530	1764	635	247
70-74	830	903	69	23	1385	1391	234	93	1160	1529	400	180
75-79#	707	987	54	23	844	1042	148	50	842	1213	187	108
80-84#	0	0	0	0	422	536	58	18	563	824	115	70
85-UP	119	222	6	4	196	299	26	17	339	563	62	49
TOTALS	31417	32132	4233	3071	35438	37210	7484	6189	41066	44552	11327	10719
GRAND TOTAL				70653				86321				107644

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1996.0	1451.2	1.375		3151.0	3065.2	1.028		3696.0	3897.6	0.948	
CV-RENAL	992.0	802.9	1.236		1647.0	1743.7	0.945		1815.0	2262.2	0.802	
HEART	710.0	572.7	1.240		1164.0	1255.6	0.950		1321.0	1556.6	0.849	
NON CV-R	1004.0	648.3	1.549		1504.0	1321.5	1.138		1881.0	1635.5	1.150	
CANCER	264.0	232.7	1.134		456.0	478.1	0.954		646.0	578.1	1.117	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1959				1969				1971			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	1018	978	1996	992	944	944	1996	992	1174	1231	1291	1315	1291	1291	3696	3696
CV-RENAL	496	496	992	496	512	512	992	496	582	620	620	1815	620	620	1815	1815
HEART	355	355	710	355	353	353	710	353	427	438	456	1321	456	456	1321	1321
NON CV-R	522	482	1004	482	432	432	1004	482	592	611	678	1881	678	678	1881	1881
CANCER	132	132	264	132	130	130	264	130	205	207	234	646	234	234	646	646

CITY CHARACTERISTICS

STATE	CODE	
	CITY CHARACTERISTICS	CODE
CALIFORNIA	1950 RANK BY POPULATION	168
1950 POP/SQ. MILE	1950 RANK BY POPULATION	168
1970 POP/SQ. MILE	1970 RANK BY POPULATION	168
1949 MED. FAM. INCOME	1949 MED. FAM. INCOME	3803
1969 MED. FAM. INCOME	1969 MED. FAM. INCOME	9533
URBAN CLASS	URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	1950 URBAN AREA RANK	110
JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	45
JULY MEAN TEMPERATURE	JULY MEAN TEMPERATURE	74
MEAN ANN. PRECIPITATION	MEAN ANN. PRECIPITATION	1
LAND RESOURCE REGION	LAND RESOURCE REGION	C
WATER SOURCE	WATER SOURCE	GROUND
TOTAL HARDNESS	TOTAL HARDNESS	91 PPM
NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	205	214	32	35	479	470	213	236
1-4	866	812	110	113	1876	1632	770	790
5-9	765	708	73	79	2323	2160	810	802
10-14	521	502	64	70	2303	2360	671	655
15-19	1208	492	0	65	2303	1755	381	407
20-24	1581	815	203	182	1912	1291	401	442
25-29	1521	866	115	88	1347	1151	450	442
30-34	1122	886	117	91	1464	1484	395	445
35-39	819	872	117	91	1725	1959	400	472
40-44	765	813	137	58	1775	1832	349	372
45-49	750	745	147	55	1711	1719	361	297
50-54	719	651	96	30	1458	1556	316	199
55-59	560	488	49	23	1367	1277	251	140
60-64	368	379	34	13	1149	1059	127	71
65-69	204	277	16	5	887	914	85	46
70-74	184	240	4	6	583	663	41	29
75-79*	0	0	0	0	297	377	16	22
80-84*	33	45	1	2	128	195	7	10
85-UP					53	100	3	5
TOTALS	13117	10533	1432	956	24906	24041	6047	5883
GRAND TOTAL				26038				60877

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP
TOTAL	639.0	1719.0	1955.0	2013.7	0.991	
CV-RENAL	309.0	870.0	951.0	1109.5	0.857	
HEART	224.0	661.0	686.0	775.8	0.884	
NON CV-R	330.0	849.0	1044.0	904.2	1.155	
CANCER	102.0	285.0	379.0	312.0	1.215	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	49-50	59-61	1969	1970	1971	69-71
TOTAL	345	294	639	596	607	607	698	SUM
CV-RENAL	168	141	309	292	331	331	328	951
HEART	123	101	224	239	234	206	248	686
NON CV-R	177	153	330	315	359	315	370	1044
CANCER	57	45	102	87	116	127	136	379
STATE	CALIFORNIA				CALIFORNIA			
1950 RANK BY POPULATION	465				465			
1950 POP/50. MILE	4413				4413			
1970 POP/50. MILE	4390				4390			
1949 MED. FAM. INCOME	3632				3632			
1969 MED. FAM. INCOME	10596				10596			
URBAN CLASS	FRINGE				FRINGE			
1950 URBAN AREA RANK	7				7			
JAN MEAN TEMPERATURE	44				44			
JULY MEAN TEMPERATURE	67				67			
MEAN ANN. PRECIPITATION	16				16			
LAND RESOURCE REGION	C				C			
WATER SOURCE	SURFACE				SURFACE			
TOTAL HARDNESS	64 PPM				64 PPM			
NON-CARBONATE HARDNESS	7 PPM				7 PPM			
FLUORIDATION STATUS	FLUORIDATED IN 1954				FLUORIDATED IN 1954			

COLORADO SPRINGS
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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1T 1	434	454	13	15	775	728	69	79	1391	1241	124	131
1-4	1656	1618	53	43	2738	2761	236	226	4355	4248	423	435
5-9	1573	1582	51	40	3356	3136	207	189	6500	6290	590	562
10-14	1319	1340	54	47	3066	3028	148	147	5615	5362	461	436
15-19	1316	1572	26	44	2355	2574	85	103	7672	7252	577	570
20-24	1505	1889	34	51	4317	4239	139	208	7472	4746	316	327
25-29	1521	1792	32	43	1689	3354	182	266	3826	4014	252	316
30-34	1843	1669	28	58	2293	2532	98	120	3826	3768	272	347
35-39	1824	1583	28	43	2273	2263	80	74	3470	3589	202	260
40-44	1532	1582	33	40	1843	2083	65	73	3192	3660	152	146
45-49	1062	1347	32	39	1563	1805	48	56	3010	2921	115	96
50-54	1001	1292	29	37	1348	1619	43	47	2100	2426	82	94
55-59	869	1365	18	37	1094	1469	34	46	1646	2041	46	72
60-64	871	1249	19	34	961	1453	25	43	1294	1790	38	44
65-69	656	980	19	23	769	1299	23	29	1021	1510	29	53
70-74	697	1140	19	23	617	943	11	25	682	1245	22	32
75-79*	0	0	0	7	293	512	10	11	426	876	8	20
80-84*	125	167	1	7	160	379	6	10	321	684	23	19
85-UP												
TOTALS	20159	24102	542	669	31602	35115	1684	1793	61397	65077	4141	4445
GRAND TOTAL				45472				70194				135060

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1244.0	1093.0	1.138		2327.0	2209.8	1.053		3215.0	3434.3	0.936	
CV-RENAL	665.0	1223.0	0.543		1223.0	1913.2	0.636		1497.0	0.782		
HEART	443.0	799.0	0.554		443.0	884.0	0.501		993.0	0.747		
NON CV-R	579.0	1104.0	0.524		579.0	1521.1	0.380		1718.0	1.129		
CANCER	186.0	319.0	0.583		186.0	0.953			438.0	0.878		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949				1959				1969				1971				1971			
	1949	1950	1954	1959	1949	1950	1954	1959	1949	1950	1954	1959	1949	1950	1954	1959	1949	1950	1954	1959
TOTAL	610	634	1244	1244	764	790	773	728	988	1093	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134
CV-RENAL	332	333	665	665	381	430	412	423	451	520	526	526	526	526	526	526	526	526	526	526
HEART	233	210	443	443	261	287	251	251	367	356	356	356	356	356	356	356	356	356	356	356
NON CV-R	278	301	579	579	383	360	361	361	537	573	608	608	608	608	608	608	608	608	608	608
CANCER	98	88	186	186	112	98	109	319	127	157	154	154	154	154	154	154	154	154	154	154

CITY CHARACTERISTICS	CODE	
	STATE	COLORADO
1950 POP/1000	260	4889
1950 POP/SQ. MILE	2221	3038
1949 MED. FAM. INCOME	9690	INDEPENDENT
URBAN CLASS	28	
1950 URBAN AREA RANK	79	
JAN MEAN TEMPERATURE	14	
JULY MEAN TEMPERATURE	14	
MEAN ANNUAL PRECIPITATION	14	
WATER SOURCE	19	
TOTAL HARDNESS	4	
NON-CARBONATE HARDNESS	4	
FLUORIDATION STATUS	NO ARTIFICIAL, HIGH NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					
	WM	WF	NM	NF	WM	NF
LT 1	4195	4234	236	206	15889	15811
1-4	15463	14038	754	740	6444	644
5-9	14603	14038	644	740	22009	21491
10-14	11435	11235	530	517	18939	18866
15-19	11534	12018	671	541	14927	15812
20-24	15258	17019	928	805	13898	16042
25-29	17821	18696	995	985	14233	14679
30-34	15556	16406	863	899	14480	15529
35-39	14187	15578	748	790	15186	16393
40-44	13263	14379	585	564	13876	15007
45-49	11661	12712	515	541	13165	15092
50-54	11118	12156	446	466	12356	13595
55-59	9908	10764	356	361	10869	12449
60-64	8476	9296	334	272	9542	11294
65-69	6592	8119	296	258	8253	10289
70-74	4609	5885	183	183	6116	8260
75-79#	4358	6330	127	156	3909	5861
80-84#	0	0	0	0	2035	3252
85-UP	766	1259	18	34	1105	2123
TOTALS	191329	206205	9229	9023	219388	239238
GRAND TOTAL				415786		493887

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61			
	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL
CV-RENAL	OBSERVED	4285.0	7680.0	7805.0	OBSERVED	4499.3	8849.9	10270.8
	EXPECTED*	4499.3	8849.9	10270.8	EXPECTED*	4499.3	8849.9	10270.8
	OBS/EXP	0.952	0.868	0.760	OBS/EXP	0.952	0.868	0.760
HEART	OBSERVED	3070.0	5265.0	5642.0	OBSERVED	3197.6	6241.3	7134.2
	EXPECTED*	3197.6	6241.3	7134.2	EXPECTED*	3197.6	6241.3	7134.2
	OBS/EXP	0.960	0.844	0.791	OBS/EXP	0.960	0.844	0.791
NON CV-R	OBSERVED	4235.0	7850.0	8111.0	OBSERVED	4235.0	7850.0	8111.0
	EXPECTED*	3588.2	6902.1	7280.0	EXPECTED*	3588.2	6902.1	7280.0
	OBS/EXP	1.180	1.154	1.114	OBS/EXP	1.180	1.154	1.114
CANCER	OBSERVED	1242.0	2328.0	2488.0	OBSERVED	1242.0	2328.0	2488.0
	EXPECTED*	1293.9	2442.2	2641.9	EXPECTED*	1293.9	2442.2	2641.9
	OBS/EXP	0.960	0.953	0.942	OBS/EXP	0.960	0.953	0.942

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	COLORADO
1950 RANK BY POPULATION	24
1950 POP/SQ. MILE	6224
1970 POP/SQ. MILE	5406
1949 MED. FAM. INCOME	3554
1969 MED. FAM. INCOME	9654
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	26
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	14
LAND RESOURCE REGION	G
WATER SOURCE	SURFACE
TOTAL HARDNESS	116 PPM
NON-CARBONATE HARDNESS	40 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1954

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	MF	WM	WF	NM	MF	WM	WF	NM	MF
TOTAL	758	695	16	23	929	942	25	23	842	801	32	39
MALE	2431	2769	80	59	4152	3274	110	102	3053	2850	97	109
5-9	2770	2655	63	57	4787	4806	138	128	4759	4590	126	163
10-14	2260	2201	67	58	4154	4125	124	106	5181	5128	142	153
15-19	1829	2145	48	66	2897	3105	81	82	4988	4900	149	149
20-24	2156	2460	60	43	2153	2497	65	69	3594	3787	119	101
25-29	2509	2632	77	69	2540	2676	74	82	2673	2803	90	75
30-34	2342	2474	59	70	2944	3072	82	72	2303	2557	95	74
35-39	2355	2361	53	44	3052	3109	90	77	2444	2613	72	88
40-44	2062	2114	44	45	2820	2791	63	68	2791	2943	63	70
45-49	1799	1853	39	44	2815	2713	71	58	2761	2975	78	72
50-54	1585	1619	39	52	2344	2396	57	45	2521	2617	60	71
55-59	1500	1501	42	30	2042	2126	47	44	2293	2462	69	56
60-64	1252	1260	39	36	1648	1755	39	59	1914	2098	36	34
65-69	1046	1061	43	43	1544	1693	48	45	1442	1745	39	44
70-74	681	803	27	16	1235	1319	37	43	1025	1358	21	42
75-79#	684	827	26	18	840	964	25	34	752	1119	27	21
80-84#	0	0	0	0	423	666	20	18	544	715	13	23
85-UP	118	133	4	3	271	426	12	7	297	477	12	14
TOTALS	30537	31553	824	771	44590	45223	1208	1160	46177	48538	1340	1398
GRAND TOTAL				63685				91181				97453

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1324.0	1158.0	1.143		2396.0	2891.5	0.829		2918.0	3026.9	0.964	
CV-RENAL												
OBSERVED	630.0	634.1	0.994		1215.0	1669.9	0.728		1471.0	1762.1	0.835	
EXPECTED*												
OBS/EXP												
HEART												
OBSERVED	434.0	453.3	0.957		897.0	1176.2	0.763		1071.0	1236.9	0.866	
EXPECTED*												
OBS/EXP												
NON CV-R												
OBSERVED	694.0	523.6	1.325		1181.0	1221.6	0.967		1447.0	1284.9	1.144	
EXPECTED*												
OBS/EXP												
CANCER												
OBSERVED	187.0	185.2	1.010		333.0	445.2	0.748		422.0	465.7	0.906	
EXPECTED*												
OBS/EXP												

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	667	657	1324		798	823	775	2396	1000	899	1019	2918
CV-RENAL	312	319	630		409	403	398	1215	507	441	523	1471
HEART	215	219	434		279	306	312	897	384	319	368	1071
NON CV-R	355	339	694		389	415	377	1181	493	458	496	1447
CANCER	91	96	187		96	116	121	333	139	146	137	422

CITY CHARACTERISTICS

STATE	COLORADO	
	1950 RANK BY POPULATION	1970 RANK BY POPULATION
1950 POP./SQ. MILE	187	6008
1970 POP./SQ. MILE	4331	3354
1949 MED. FAM. INCOME	3354	8553
1969 MED. FAM. INCOME	8553	CENTRAL
URBAN CLASS	151	151
1950 URBAN AREA RANK	29	29
JAN MEAN TEMPERATURE	74	74
JULY MEAN TEMPERATURE	11	11
MEAN ANN. PRECIPITATION	G	G
LAND RESOURCE REGION	SURFACE	SURFACE
WATER SOURCE	191 PPM	191 PPM
TOTAL HARDNESS	117 PPM	117 PPM
NON-CARBONATE HARDNESS	NO ARTIFICIAL, OPTIMUM NATURAL	NO ARTIFICIAL, OPTIMUM NATURAL
FLUORIDATION STATUS		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	1390	1325	97	84	1523	1477	293	298
1-4	5747	5519	320	299	5881	5517	1098	1042
5-9	5806	5483	272	267	5981	5523	1024	1002
10-14	4326	4114	245	227	5094	5354	692	692
15-19	5272	4871	245	226	4340	4645	438	491
20-24	5208	5871	297	337	3339	4645	439	683
25-29	6568	7041	596	396	4433	4333	640	668
30-34	6896	7206	285	340	4742	4631	663	660
35-39	6503	6350	266	306	4935	5108	635	649
40-44	5098	4932	232	241	5066	5415	438	468
45-49	4411	4679	254	203	4848	4962	368	394
50-54	4301	4686	188	135	3940	4136	273	263
55-59	4519	4524	126	86	3466	3812	257	201
60-64	3855	3692	99	73	3172	3685	156	138
65-69	2730	2838	58	57	3027	3571	96	96
70-74	1621	1900	39	42	2347	2743	69	83
75-79*	1332	1797	33	36	1355	1606	37	50
80-84*	0	0	0	0	549	831	23	25
85-UP	218	326	1	6	275	463	8	15
TOTALS	74823	77030	3455	3401	68681	72502	7647	7918
GRAND TOTAL				158709				156748

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1971				69-71 SUM
	1949	1950	49-50 SUM		1959	1960	1961	SUM	1969	1970	1971		1971	1970	1971		
TOTAL	1602	1607	3209		1772	1858	1787	5417	1868	1796	1722		5386				5386
CV-RENAL	906	937	1843		1001	1032	999	3032	1004	958	942		2954				2954
HEART	673	686	1359		753	757	739	2249	726	700	717		2117				2117
NON CV-R	696	670	1366		771	826	788	2385	864	838	780		2492				2492
CANCER	278	256	534		334	372	317	1023	337	351	302		990				990

CITY CHARACTERISTICS

CODE

STATE	CONNECTICUT
1950 RANK BY POPULATION	63
1950 POP/SQ. MILE	10870
1970 POP/SQ. MILE	9723
1949 MED. FAM. INCOME	3315
1969 MED. FAM. INCOME	9849
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	52
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	42
LAND RESOURCE REGION	R
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	29 PPM
NON-CARBONATE HARDNESS	15 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1967

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	3209.0	2805.3	1.144	5417.0	4890.4	1.108	5386.0	5628.5	0.957
CV-RENAL									
OBSERVED	1843.0			3032.0			2904.0		
EXPECTED*	1520.4			2700.1			3266.6		
OBS/EXP	1.212			1.123			0.889		
HEART									
OBSERVED	1359.0			2249.0			2117.0		
EXPECTED*	1099.6			1928.1			2273.7		
OBS/EXP	1.236			1.166			0.931		
NON CV-R									
OBSERVED	1366.0			2385.0			2482.0		
EXPECTED*	1284.9			2190.3			2362.0		
OBS/EXP	1.063			1.089			1.051		
CANCER									
OBSERVED	534.0			1033.0			990.0		
EXPECTED*	470.8			766.5			852.5		
OBS/EXP	1.135			1.301			1.161		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	MM	NF	NF		WM	WF	MM	NF	NF		WM	WF	MM	NF	NF	
LT 1	366	339	3	2	9		519	501	473	503	13		473	503	11	13		
5-4	1553	1536	8	13	28		2241	2270	2029	1800	46		2029	1800	46	41		
5-9	1273	1536	6	11	39		2289	2293	2906	2700	50		2906	2700	50	43		
15-14	1095	1165	13	8	27		2089	1914	2901	2994	40		2901	2994	40	38		
15-19	1095	1165	13	8	27		1470	1566	2284	2369	39		2284	2369	39	30		
20-24	1218	1468	11	6	17		1997	1291	1879	2317	27		1879	2317	27	46		
25-29	1523	1699	8	9	15		1400	1454	1948	1948	27		1948	1948	27	35		
30-34	1593	1636	6	11	22		1668	1654	1474	1535	20		1474	1535	20	20		
35-39	1399	1487	6	5	21		1658	1776	1535	1580	14		1535	1580	14	20		
40-44	1201	1221	7	5	9		1583	1647	1722	1722	18		1722	1722	18	16		
45-49	1083	1077	3	3	11		1438	1497	1690	1788	13		1690	1788	13	14		
50-54	1041	1076	3	3	8		1197	1175	1556	1669	19		1556	1669	19	15		
55-59	950	873	3	1	6		1008	1019	1431	1431	5		1431	1431	5	10		
60-64	749	681	2	0	3		819	918	1082	1082	10		1082	1082	10	11		
65-69	514	545	0	0	2		728	724	882	882	7		882	882	7	6		
70-74	315	364	1	1	0		493	574	502	766	4		502	766	4	2		
75-79*	295	346	0	1	0		287	341	356	491	2		356	491	2	2		
80-84*	0	0	0	0	0		111	180	181	300	2		181	300	2	0		
85-UP	37	64	0	0	0		58	108	86	156	3		86	156	3	0		
TOTALS	17603	18181	80	97	237		22103	22942	217	237	362		26607	28151	367	55487		
GRAND TOTAL					35961					45499								

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	531.0	560.1	0.948	1094.0	1117.4	0.979	1265.0	1403.9	0.901
CV-PENAL	277.0	296.9	0.933	596.0	595.7	1.001	659.0	775.3	0.856
HEART	209.0	216.1	0.967	444.0	431.3	1.029	469.0	555.3	0.845
NON CV-R	254.0	263.1	0.965	498.0	521.7	0.955	606.0	628.6	0.964
CANCER	96.0	94.1	1.020	205.0	184.1	1.113	247.0	229.6	1.076

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	49-50 SUM	1959	1960	1961	1969	1970	1971	69-71 SUM	STATE	CODE
TOTAL	264	267	531	375	359	360	426	425	414	1265	CONNECTICUT	335
CV-PENAL	143	143	286	203	196	197	212	232	218	659	1950 RANK BY POPULATION	1352
HEART	99	110	209	138	152	194	138	158	158	469	1950 POB/SO. MILE	2086
NON CV-R	130	124	254	172	163	163	214	193	199	606	1949 MED. FAM. INCOME	3506
CANCER	47	49	96	65	68	72	73	82	92	247	1969 MED. FAM. INCOME	11855
											URBAN CLASS	CENTRAL
											1950 URBAN AREA RANK	180
											JAN. MEAN TEMPERATURE	28
											JULY MEAN TEMPERATURE	78
											LAND AREA, PRECIPITATION	46
											LAND RESOURCE REGION	F
											WATER SOURCE	GROUND AND SURFACE
											TOTAL HARDNESS	11 gpm
											NON-CARBONATE HARDNESS	4 gpm
											FLUORIDATION STATUS	FLUORIDATED IN 1960

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	RF	NM	NP	WM	RF	NM	NP	WM	RF	NM	NP
LT 1	1090	1474	170	187	1485	1310	475	461	974	956	665	621
1-4	5986	5655	653	608	4910	4791	1738	1639	3258	3261	2407	2431
5-9	5646	5461	572	521	4797	4760	1557	1600	3841	3730	3307	3059
10-14	4240	4229	455	485	4591	4407	1141	1096	3831	3597	2670	2557
15-19	4465	4950	457	399	4304	4819	760	771	4503	5141	1954	2270
20-24	5902	7334	573	608	4575	5485	815	1199	5886	6783	1813	2651
25-29	7161	7765	709	707	4678	4355	1007	1154	4442	3995	1749	2253
30-34	6897	7418	578	605	4475	4241	1016	1040	2874	2590	1518	1769
35-39	6336	6750	527	505	4468	4484	1009	1013	2462	2365	1180	1374
40-44	5624	6292	399	439	4232	4738	749	784	2859	2879	1120	1241
45-49	5171	5698	385	354	4467	4913	605	578	3182	3345	1010	998
50-54	5031	5495	297	286	4104	4777	383	435	3101	3608	761	882
55-59	4895	4911	226	228	3873	4416	370	400	3118	3628	606	617
60-64	3954	3843	143	172	3565	4165	225	250	2734	3560	388	522
65-69	2944	3263	106	132	3078	3620	168	240	1997	3030	310	439
70-74	1821	2186	57	82	2198	2639	123	152	1613	2654	215	282
75-79*	1559	2119	60	68	1261	1722	56	78	1161	2032	107	144
80-84*	0	0	0	0	553	911	27	38	612	1116	48	78
85-UP	236	406	13	14	297	563	18	21	387	757	56	83
TOTALS	79358	85249	6380	6410	65911	71116	12242	12909	52835	59027	21884	24271
GRAND TOTAL				177397				162178				158617

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	3590.0	3240.6	1.108	5737.0	5256.5	1.091	5355.0	5388.7	1.003
CV-RENAL									
OBSERVED	1971.0			3033.0			2566.0		
EXPECTED*	1758.7			2891.4			2998.5		
OBS/EXP	1.121			1.049			0.856		
HEART									
OBSERVED	1002.0			2214.0			1892.0		
EXPECTED*	1263.9			2052.6			2071.4		
OBS/EXP	0.793			1.079			0.913		
NON CV-R									
OBSERVED	1619.0			2704.0			2789.0		
EXPECTED*	1461.8			2365.1			2346.3		
OBS/EXP	1.093			1.143			1.192		
CANCER									
OBSERVED	604.0			1013.0			980.0		
EXPECTED*	536.7			834.7			785.0		
OBS/EXP	1.125			1.214			1.248		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE	
	1949	1950	1959	1960	1961	1969	1970	1971		69-71 SUM
TOTAL	1768	1822	3590	1973	1900	5737	1861	1777	1717	5355
CHRONIC	953	1018	1971	1058	967	3033	908	851	806	2566
HEART	745	257	1002	790	696	2214	680	636	576	1892
NON CV-R	815	804	1619	906	906	2704	953	926	910	2789
CANCER	304	300	604	353	325	1013	333	314	333	980

POPULATION
 BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
1T 1	403	412	4	4	558	524	17	12	449	468	28	21
1-4	1834	1660	16	14	2262	2194	68	59	1822	1813	106	98
5-9	1685	1581	8	12	2459	2391	57	65	2607	2506	104	91
10-14	1295	1094	37	6	2288	2133	52	42	2731	2585	137	77
15-19	1250	1293	25	7	1604	1593	60	32	2337	2346	106	86
20-24	1330	1660	10	14	1215	1372	24	33	1835	2154	84	77
25-29	1746	1911	13	19	1554	1556	32	37	1736	1761	67	73
30-34	1850	2025	23	19	1711	1767	40	33	1392	1373	40	32
35-39	1658	1750	22	20	1931	1960	32	34	1536	1450	38	35
40-44	1479	1527	16	13	1619	1589	24	25	1712	1800	23	47
45-49	1246	1314	11	10	1474	1481	16	15	1640	1905	23	33
50-54	1172	1207	10	4	1165	1258	8	8	1407	1523	16	21
55-59	1024	1073	16	4	1016	1163	5	7	1124	1274	12	12
60-64	921	989	3	3	938	1166	5	8	813	1093	6	8
65-69	539	591	4	2	702	876	5	3	645	954	6	4
70-74	502	716	0	0	401	572	5	1	447	789	2	2
75-79*	86	153	1	0	191	340	1	2	281	487	2	2
80-84*					112	232	0	0	158	325	4	3
85-UP												
TOTALS	21289	22432	219	148	24807	26118	469	456	26079	28253	848	779
GRAND TOTAL				44088				51850				55959

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
 BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	846.0	1637.0	1607.0	846.0	1637.0	1607.0	846.0	1637.0	1607.0
CV-RENAL	484.0	968.0	935.0	484.0	968.0	935.0	484.0	968.0	935.0
HEART	378.0	684.0	681.0	378.0	684.0	681.0	378.0	684.0	681.0
NON CV-R	362.0	669.0	682.0	362.0	669.0	682.0	362.0	669.0	682.0
CANCER	164.0	291.0	316.0	164.0	291.0	316.0	164.0	291.0	316.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CONNECTION		CONNECTION		CONNECTION	
	STATE	1950 RANK BY POPULATION	STATE	1950 RANK BY POPULATION	STATE	1950 RANK BY POPULATION
CONNECTICUT	268	1917	CONNECTICUT	268	CONNECTICUT	268
1950 POP/SQ. MILE	1917	1950 POP/SQ. MILE	1917	1950 POP/SQ. MILE	1917	1950 POP/SQ. MILE
1970 POP/SQ. MILE	2361	1970 POP/SQ. MILE	2361	1970 POP/SQ. MILE	2361	1970 POP/SQ. MILE
1949 MED. FAM. INCOME	3604	1949 MED. FAM. INCOME	3604	1949 MED. FAM. INCOME	3604	1949 MED. FAM. INCOME
1969 MED. FAM. INCOME	11089	1969 MED. FAM. INCOME	11089	1969 MED. FAM. INCOME	11089	1969 MED. FAM. INCOME
URBAN CLASS	INDEPENDENT	URBAN CLASS	INDEPENDENT	URBAN CLASS	INDEPENDENT	URBAN CLASS
1950 URBAN AREA RANK	28	1950 URBAN AREA RANK	28	1950 URBAN AREA RANK	28	1950 URBAN AREA RANK
JAN MEAN TEMPERATURE	78	JAN MEAN TEMPERATURE	78	JAN MEAN TEMPERATURE	78	JAN MEAN TEMPERATURE
JULY MEAN TEMPERATURE	45	JULY MEAN TEMPERATURE	45	JULY MEAN TEMPERATURE	45	JULY MEAN TEMPERATURE
MEAN ANN. PRECIPITATION	R	MEAN ANN. PRECIPITATION	R	MEAN ANN. PRECIPITATION	R	MEAN ANN. PRECIPITATION
LAND RESOURCE REGION	40 PER	LAND RESOURCE REGION	40 PER	LAND RESOURCE REGION	40 PER	LAND RESOURCE REGION
WATER SOURCE	FLUORIDATED IN 1968	WATER SOURCE	FLUORIDATED IN 1968	WATER SOURCE	FLUORIDATED IN 1968	WATER SOURCE
TOTAL HARDNESS		TOTAL HARDNESS		TOTAL HARDNESS		TOTAL HARDNESS
NON-CARBONATE HARDNESS		NON-CARBONATE HARDNESS		NON-CARBONATE HARDNESS		NON-CARBONATE HARDNESS
FLUORIDATION STATUS		FLUORIDATION STATUS		FLUORIDATION STATUS		FLUORIDATION STATUS

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	231	236	6	6	336	306	26	21	267	253	41	41
1-4	1019	911	25	31	1220	1189	63	77	1087	1068	149	137
5-9	980	916	24	19	1257	1203	82	65	1476	1440	139	160
10-14	787	765	19	21	1178	1221	56	76	1457	1445	140	165
15-19	1061	888	15	34	1321	1079	49	85	1623	1317	133	145
20-24	1349	1098	22	22	1109	964	52	50	1825	1578	179	163
25-29	1165	1175	32	28	972	911	53	56	1191	1206	151	143
30-34	1130	1247	23	29	1068	1050	44	60	904	920	94	97
35-39	1114	1143	30	24	1091	1145	52	39	899	818	72	76
40-44	1020	1054	15	16	1143	1226	37	36	918	1036	53	53
45-49	850	867	19	9	1054	1078	31	29	1034	1185	56	48
50-54	858	921	12	12	995	996	22	18	1058	1135	43	43
55-59	759	875	8	9	739	792	23	25	900	940	27	28
60-64	697	800	8	7	706	823	18	13	790	874	21	21
65-69	554	623	9	9	570	736	10	11	496	610	20	15
70-74	395	478	10	4	470	658	14	14	429	560	10	11
75-79*	407	556	3	7	278	380	7	4	263	442	7	8
80-84*	0	0	0	0	157	233	2	3	167	298	2	5
85-89*	75	140	0	0	83	187	1	2	114	202	0	3
TOTALS	14451	14693	279	288	15747	16177	642	684	17398	17327	1337	1362
GRAND TOTAL				29711				33250				36924

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970			
	1949	1950	49-50 SUM	59-61 SUM	1959	1960	1961	1969 SUM	1969	1970	1971	69-71 SUM
TOTAL	240	229	469	804	289	207	308	804	299	320	304	923
CV-RENAL	136	133	269	488	179	123	186	488	169	175	172	516
HEART	89	90	179	344	124	87	133	344	110	130	111	351
NON CV-R	104	96	200	316	110	84	122	316	130	145	132	407
CANCER	36	45	81	124	36	36	52	124	50	61	61	172

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	CONNECTICUT
1950 RANK BY POPULATION	402
1950 POP./SQ. MILE	711
1970 POP./SQ. MILE	839
1949 MED. FAM. INCOME	3461
1969 MED. FAM. INCOME	11280
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	27
JULY MEAN TEMPERATURE	77
MEAN ANN. PRECIPITATION	56
LAND RESOURCE REGION	E
WATER SOURCE	SURFACE
TOTAL HARDNESS	23 PPM
NON-CARBONATE HARDNESS	18 PPM
FLUORIDATION STATUS	FLOIDATED IN 1960

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	1285	1210	115	100	1297	1191	443	409	743	681	480	530
1-4	5497	5356	448	462	4319	4189	1527	1462	2698	2418	1983	2200
5-9	5370	5319	440	411	4453	4364	1429	1387	2986	2823	2692	2709
10-14	4221	4129	370	412	4511	4470	972	970	2949	2853	2265	2252
15-19	5728	4532	311	373	5463	4305	659	770	4914	4245	1761	1771
20-24	8151	6394	371	483	6374	4703	809	1117	6756	6436	1556	2019
25-29	6941	6921	501	506	4511	4605	946	1078	4156	3827	1339	1785
30-34	6314	6728	415	471	3934	3776	911	934	2233	2109	1128	1462
35-39	5654	6073	396	421	3784	4079	782	871	1919	1961	907	1174
40-44	4752	5301	326	308	4015	4481	572	631	2181	2402	827	1008
45-49	4322	4802	288	284	3980	4363	515	551	2480	2891	705	904
50-54	4398	4729	204	219	3579	4475	362	411	2781	3373	561	639
55-59	4767	4409	161	189	3312	3914	297	341	2736	3328	403	522
60-64	3640	3684	152	123	3082	3792	239	268	2393	2970	231	422
65-69	2795	3167	114	131	2826	3426	168	204	2092	2692	164	216
70-74	1912	2190	90	76	2237	2729	180	197	1692	2592	114	131
75-79	1656	2203	60	71	1827	2466	130	179	1182	1914	77	99
80-84	285	448	0	0	1330	891	43	63	736	1210	58	99
85-UP			5	18	332	549	44	35	408	793	44	72
TOTALS	76997	77621	4767	5058	64000	65363	10927	11738	47960	52026	17464	20257
GRAND TOTAL				164443				152048				137707

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	3617.0	5315.0	4748.0		3617.0	5315.0	4748.0		3617.0	5315.0	4748.0	
CV-RENAL	2075.0	3030.0	2556.0		2075.0	3030.0	2556.0		2075.0	3030.0	2556.0	
HEART	1743.6	2826.0	6.874		1743.6	2826.0	6.874		1743.6	2826.0	6.874	
	1.190	1.061			1.190	1.061			1.190	1.061		
	1575.0	2246.0	1926.0		1575.0	2246.0	1926.0		1575.0	2246.0	1926.0	
	1244.3	2015.6	2011.1		1244.3	2015.6	2011.1		1244.3	2015.6	2011.1	
	1.266	1.114	0.955		1.266	1.114	0.955		1.266	1.114	0.955	
NON CV-R	1542.0	2285.0	2192.0		1542.0	2285.0	2192.0		1542.0	2285.0	2192.0	
	1388.3	2256.3	2128.5		1388.3	2256.3	2128.5		1388.3	2256.3	2128.5	
	1.110	1.013	1.030		1.110	1.013	1.030		1.110	1.013	1.030	
CANCER	636.0	916.0	845.0		636.0	916.0	845.0		636.0	916.0	845.0	
	511.0	800.0	739.9		511.0	800.0	739.9		511.0	800.0	739.9	
	1.245	1.145	1.142		1.245	1.145	1.142		1.245	1.145	1.142	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	CONNECTICUT		
1950 RANK BY POPULATION	59		
1950 POP/SQ. MILE	9187		
1970 POP/SQ. MILE	7484		
1949 MED. FAM. INCOME	3301		
1969 MED. FAM. INCOME	9031		
URBAN CLASS	CENTRAL		
1950 URBAN AREA RANK	50		
JAN MEAN TEMPERATURE	29		
JULY MEAN TEMPERATURE	71		
MEAN ANNUAL PRECIPITATION	44		
MEAN RESCUE REGION	8		
WATER SOURCE	SURFACE		
TOTAL HARDNESS	43 GPM		
NON-CARBONATE HARDNESS	18 GPM		
FLUORIDATION STATUS	FLUORIDATED IN 1967		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	236	938	25	29	334	293	46	46	202	219	37	60
1-4	999	335	85	69	1079	1151	163	147	684	686	208	184
5-9	998	1004	48	67	1170	1059	155	163	865	853	274	261
10-14	850	804	48	64	1052	1016	134	133	837	914	211	233
15-19	1295	1362	70	60	1512	1694	68	99	1612	1719	219	223
20-24	1516	1418	96	72	2424	1328	120	75	2690	1937	232	220
25-29	1046	1087	72	75	1183	762	154	101	1135	739	166	147
30-34	1060	1114	49	54	1202	826	138	107	1135	467	138	114
35-39	936	1081	50	39	998	872	121	101	509	510	111	122
40-44	933	1068	39	38	925	960	65	55	648	620	133	122
45-49	828	907	56	35	813	924	54	55	629	726	87	113
50-54	852	908	49	34	746	824	44	54	742	821	58	77
55-59	741	809	21	22	686	816	55	38	585	765	50	42
60-64	607	713	14	24	657	772	34	27	579	722	41	42
65-69	524	587	11	21	533	691	28	23	449	692	28	43
70-74	395	466	11	11	397	614	15	24	374	610	25	20
75-79#	302	468	5	0	277	374	10	15	249	416	6	12
80-84*	0	0	0	0	118	220	3	6	150	324	8	16
85-UP	45	108	1	1	56	145	2	3	87	181	7	9
TOTALS	14071	15017	758	705	16162	15339	1409	1272	13611	13921	2039	2059
GRAND TOTAL				30551				34182				31630

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	325	331	656	343	340	364	1047	334	343	359	1036
CV-RENAL	178	200	378	192	207	215	614	183	197	195	575
HEART	129	133	262	122	137	133	392	128	132	143	403
NON CV-R	147	131	278	151	133	149	433	151	146	164	461
CANCER	61	52	113	55	56	64	175	61	54	61	176

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE
STATE	CONNECTICUT	
1950 BANK BY POPULATION	391	
1950 POP./SQ. MILE	5008	
1970 POP./SQ. MILE	5185	
1949 MED. FAM. INCOME	3216	
1969 MED. FAM. INCOME	9657	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	29	
JULY MEAN TEMPERATURE	71	
MEAN ANN. PRECIPITATION	44	
LAND RESOURCE REGION	B	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	11 PPM	
NON-CARBONATE HARDNESS	6 PPM	
FLUORIDATION STATUS	FLUORIDATED	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	WM	NF	WM	WF	NM	NF	WM	NF
LT 1	453	372	28	24	726	667	98	89	98	89	531	536
1-4	1826	1848	103	100	2931	2774	313	315	313	315	2413	2359
5-9	1862	1799	108	99	3188	2972	290	295	290	295	3495	3328
10-14	1391	1430	78	81	2547	2583	209	222	209	222	3458	3257
15-19	1280	1396	64	64	1828	1849	162	207	162	207	2694	2643
20-24	1461	1695	98	108	1321	1619	223	256	223	256	1996	2567
25-29	1770	1945	112	142	1802	2005	205	242	205	242	2315	2488
30-34	1869	2093	120	126	2317	2436	214	255	214	255	1985	2164
35-39	1808	2025	78	116	2486	2483	180	218	180	218	2148	2109
40-44	1838	1831	91	105	2205	2325	181	198	181	198	2304	2448
45-49	1618	1587	71	89	2071	2153	134	169	134	169	2247	2377
50-54	1402	1433	65	50	1788	1812	112	114	112	114	2024	2208
55-59	1231	1267	44	36	1557	1629	101	105	101	105	1771	1980
60-64	1043	1136	24	27	1196	1332	54	58	54	58	1509	1574
65-69	736	892	25	25	918	1148	49	39	49	39	957	1291
70-74	538	640	13	26	703	964	34	39	34	39	679	1043
75-79*	438	713	7	13	339	598	13	13	13	13	455	779
80-84*	0	0	0	0	222	355	2	11	2	11	253	519
85-UP	69	144	1	0	145	313	10	9	10	9	164	335
TOTALS	22853	24246	1130	1231	30320	32017	2584	2854	2584	2854	33398	36005
GRAND TOTAL				49460				67775			4393	5317

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	1959	SUM	1961	1969	1971	SUM
TOTAL	437	487	625	924	562	642	610	1820
CV-RENAL	232	271	346	503	308	363	322	989
HEART	163	187	235	350	208	267	239	722
NON CV-R	205	216	279	421	254	279	288	831
CANCER	89	83	124	172	103	112	110	338

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	924.0	1747.0	1.014		1747.0	1940.9	0.900		1820.0	2252.7	0.808	
CV-RENAL	503.0	951.0	0.998		951.0	1069.6	0.889		989.0	1266.7	0.781	
HEART	350.0	651.0	0.971		651.0	755.5	0.862		722.0	889.7	0.812	
NON CV-R	421.0	796.0	1.033		796.0	871.3	0.914		831.0	986.1	0.843	
CANCER	172.0	328.0	1.152		328.0	301.0	1.090		338.0	352.1	0.960	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
CONNECTICUT	236	2002	3596	3874	12507	CENTRAL	72	26	71	44	R	SURFACE	34 PPM	17 PPM	FLUORIDATED IN 1968

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	626	614	38	44	893	867	131	117	177	157	705	639	157	191	2839	2755	687	747
1-4	2905	2750	146	160	3714	3591	464	405	481	404	4132	4154	976	980	4617	4597	710	751
5-9	2844	2760	157	139	4147	3989	362	381	288	288	3864	3926	548	580	3720	3443	304	288
10-14	2043	2074	152	144	3720	3443	304	288	215	258	3864	3926	548	580	2733	3374	501	710
15-19	2093	2118	141	158	3720	3443	304	288	412	370	2816	3127	571	733	2816	3127	571	733
20-24	2333	2126	143	162	3720	3443	304	288	319	319	2472	2755	478	612	2472	2755	478	612
25-29	2798	3198	183	220	3025	3306	296	319	319	319	2679	3001	365	465	2679	3001	365	465
30-34	2908	3152	176	218	3248	3426	290	319	277	277	3305	3496	294	352	3305	3496	294	352
35-39	2775	3024	163	227	3152	3356	230	277	283	283	3334	3466	294	352	3334	3466	294	352
40-44	2619	2762	176	181	2916	3036	210	283	169	169	3042	3233	211	276	3042	3233	211	276
45-49	2308	2231	113	153	2581	2692	169	169	109	109	2642	2833	169	211	2642	2833	169	211
50-54	2107	2170	108	140	2381	2592	169	169	109	109	2642	2833	169	211	2642	2833	169	211
55-59	1638	1457	35	54	1738	1616	102	101	101	101	2046	2395	160	200	2046	2395	160	200
60-64	1038	1258	20	29	1382	1651	58	69	69	69	1379	1788	86	174	1379	1788	86	174
65-69	699	875	23	20	1001	1266	37	53	53	53	900	1608	62	103	900	1608	62	103
70-74	579	853	16	17	574	810	19	21	21	21	725	1188	33	56	725	1188	33	56
75-79	0	0	0	0	280	428	11	16	16	16	380	748	26	37	380	748	26	37
80-84	0	0	0	0	168	291	13	7	7	7	231	466	19	24	231	466	19	24
85-UP	91	208	5	4	168	291	13	7	7	7	231	466	19	24	231	466	19	24
TOTALS	34154	36160	1858	2121	41195	43856	3590	4072	4735	4735	45143	49515	6405	7735	45143	49515	6405	7735
GRAND TOTAL				74293				92713						108798				

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1235.0	1275.1	0.969		2569.0	2584.3	0.994		2736.0	3269.1	0.837	
CV-RENAL	631.0	692.1	0.912		1385.0	1407.1	0.970		1387.0	1853.6	0.748	
HEART	432.0	496.6	0.870		1018.0	1002.9	1.015		998.0	1301.6	0.767	
NON CV-R	604.0	583.0	1.036		1204.0	1177.2	1.023		1349.0	1415.5	0.953	
CANCER	219.0	210.1	1.043		494.0	416.0	1.187		528.0	513.3	1.029	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS						CODE
	1949	1950	49-50 SUM	1959	1960	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	CONNECTION	
TOTAL	620	615	1235	827	862	2569	932	890	914	2736	1950 RANK BY POPULATION	154	
CV-RENAL	323	308	631	440	450	1387	433	499	455	1387	1950 POP/50. MILE	1976	
HEART	226	206	432	326	322	1018	311	372	315	998	1970 POP/50. MILE	2856	
NON CV-R	297	307	604	387	412	1204	459	459	459	1349	1949 MED. FAM. INCOME	3925	
CANCER	107	112	219	150	164	494	193	156	179	528	1969 MED. FAM. INCOME	13571	
											URBAN CLASS	CENTRAL	
											1950 URBAN AREA RANK	72	
											JAN MEAN TEMPERATURE	26	
											JULY MEAN TEMPERATURE	71	
											MEAN ANN. PRECIPITATION	44	
											LAND RESOURCE REGION	R	
											WATER SOURCE	SURFACE	
											TOTAL HARDNESS	31 PPM	
											NON-CARBONATE HARDNESS	15 PPM	
											FLUORIDATION STATUS	UNCEPTAIN	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	924	903	44	47	990	991	136	113	831	717	152	176
1-4	3844	3684	170	187	3971	3866	516	481	3058	3010	652	622
5-9	4084	3959	189	171	4435	4302	461	470	3977	3810	756	813
10-14	3133	2958	146	152	4263	4137	359	358	4323	4237	796	710
15-19	2909	3035	111	128	3255	3608	233	270	3996	3981	541	567
20-24	3179	3616	146	191	4234	2758	223	285	3666	3934	336	530
25-29	3937	4341	194	197	4567	2643	291	327	4058	3769	350	466
30-34	4094	4427	176	175	4850	3077	270	356	2193	2227	259	357
35-39	3889	4202	128	150	3351	3637	263	320	2193	2227	259	357
40-44	3452	3541	126	120	3431	3520	142	230	2193	2227	259	357
45-49	3064	3342	123	81	2656	3066	130	197	2968	3355	275	303
50-54	3029	2843	107	48	2695	2952	104	105	3069	3551	202	218
55-59	2569	2407	92	31	2352	2774	86	72	2312	2776	112	119
60-64	1934	1944	30	28	2223	2523	44	38	1844	2472	99	111
65-69	1138	1335	19	17	1616	1814	23	34	1425	2154	70	76
70-74	1138	1335	19	17	1616	1814	23	34	1425	2154	70	76
75-79	1005	1209	12	15	931	1150	12	14	1075	1617	32	43
80-84	0	0	0	0	419	599	10	11	616	909	17	26
85-UP	121	205	4	3	229	356	5	5	322	608	7	19
TOTALS	49422	51394	1823	1838	48019	51890	3512	3709	45795	50850	5338	6050
GRAND TOTAL				104477				107130				108033

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	2061.0	1869.2	1.091		2061.0	1869.2	1.091		2061.0	1869.2	1.091	
CV-RENAL												
OBSERVED	1115.0	2010.0	0.555		1115.0	2010.0	0.555		1115.0	2010.0	0.555	
EXPECTED*	1023.6	1919.6	1.047		1023.6	1919.6	1.047		1023.6	1919.6	1.047	
OBS/EXP	1.083				1.083				1.083			
HEART												
OBSERVED	830.0	1473.0	0.564		830.0	1473.0	0.564		830.0	1473.0	0.564	
EXPECTED*	746.7	1372.9	1.073		746.7	1372.9	1.073		746.7	1372.9	1.073	
OBS/EXP	1.112				1.112				1.112			
NON CV-R												
OBSERVED	946.0	1624.0	0.583		946.0	1624.0	0.583		946.0	1624.0	0.583	
EXPECTED*	859.6	1497.2	1.085		859.6	1497.2	1.085		859.6	1497.2	1.085	
OBS/EXP	1.101				1.101				1.101			
CANCER												
OBSERVED	388.0	651.0	0.596		388.0	651.0	0.596		388.0	651.0	0.596	
EXPECTED*	319.6	557.4	1.168		319.6	557.4	1.168		319.6	557.4	1.168	
OBS/EXP	1.214				1.214				1.214			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	1034	1027	2061		1215	1235	1184	3634	1173	1212	1232	3617
CV-RENAL	560	555	1115		668	685	657	2010	662	729	719	2110
HEART	421	409	830		478	534	461	1473	504	529	537	1570
NON CV-R	474	472	946		547	550	527	1624	511	483	513	1507
CANCER	196	192	388		227	219	205	651	245	216	251	712

CITY CHARACTERISTICS

STATE	CONNECTICUT
1950 RANK BY POPULATION	103
1950 POP/SQ. MILE	3785
1970 POP/SQ. MILE	3914
1949 MED. FAM. INCOME	3471
1969 MED. FAM. INCOME	10459
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	94
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	78
MEAN ANNUAL PRECIPITATION	46
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	2.0 PPM
NON-CARBONATE HARDNESS	10 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1968

POPULATION												DEATHS AND DENSITY RATIOS									
BY AGE, RACE, SEX AND CENSUS YEAR												BY CAUSE									
AGE GROUP	1950				1960				1970				TOTAL	1949-50				1959-61		1969-71	
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP		OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP		
LT. 1	760	694	157	147	588	562	387	389	283	229	394	378									
1-4	3173	3118	682	692	2115	2077	1519	1498	1000	944	1600	1651	OBSERVED	2767.0	4082.0	3808.0					
5-9	3264	3192	668	724	2543	2425	1514	1533	1406	1339	2409	2438	EXPECTED*	2114.4	3512.0	3381.2					
10-14	2812	2783	595	583	2765	2726	1044	1094	1589	1469	2318	2257	OBS/EXP	1.309	1.162	1.126					
15-19	2912	3165	523	519	2370	2905	737	857	1634	1755	1679	1775	CV-Renal								
20-24	3230	3838	584	677	1908	2105	658	868	1405	1622	990	1572	OBSERVED	1155.4	1969.4	1967.2					
25-29	3757	3985	668	796	1705	1580	791	942	1169	1118	871	1243	EXPECTED*								
30-34	3704	3948	710	793	1676	1785	798	908	859	883	940	1166	OBS/EXP								
35-39	3201	3724	772	853	2070	2387	801	952	881	820	876	1132									
40-44	3280	3529	724	720	2331	2731	748	836	988	1093	878	974	HEART								
45-49	2844	3131	642	656	2465	2735	726	811	1300	1612	831	968	OBSERVED								
50-54	2850	3182	590	512	2357	2657	639	674	1497	1932	682	773	EXPECTED*	817.6	1374.4	1339.6					
55-59	2697	2806	430	385	2090	2478	597	532	1594	1944	658	714	OBS/EXP								
60-64	2167	2309	256	261	1871	2336	373	397	1459	1965	496	669									
65-69	1681	1953	243	229	1730	2203	325	327	1129	1741	394	489									
70-74	1017	1347	126	130	1321	1700	196	199	963	1582	266	313	NON CV-R								
75-79#	961	1363	99	119	780	1136	115	111	689	1231	152	217	OBSERVED	959.0	1542.6	1414.0					
80-84#	0	0	0	0	343	616	50	58	369	742	68	109	EXPECTED*								
85-UP	140	262	12	20	196	384	27	44	189	477	63	82	OBS/EXP								
TOTALS	44750	48329	8481	8796	33224	37528	12045	13030	20403	24498	16565	19920									
GRAND TOTAL				110356				95827				80386									
* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED																					
* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES																					
CITY CHARACTERISTICS												CODE									
STATE												DELAWARE									
1950 BANK BY POPULATION												94									
1950 POP/SQ. MILE												11261									
1970 POP/SQ. MILE												6231									
1949 MED. FAM. INCOME												3316									
1969 MED. FAM. INCOME												8050									
URBAN CLASS												CENTRAL									
1950 URBAN AREA RANK												66									
JAN MEAN TEMPERATURE												33									
JULY MEAN TEMPERATURE												75									
MEAN ANN. PRECIPITATION												44									
LAND RESOURCE REGION												S									
WATER SOURCE												SURFACE									
TOTAL HARDNESS												48 PPM									
NON-CARBONATE HARDNESS												26 PPM									
FLUORIDATION STATUS												FLUORIDATED IN 1960									

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	100	100	100

EXPECTED*	2195.2	3656.1	3603.4
OBS/EXP	1.158	1.181	1.252

RODUCTION FOR METHOD OF CALCULATING EXPERIMENTAL DATA

CITY CHARACTERISTICS	CODE	DISTRICT CODE
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DISTRICT OF COLUMBIA

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
1-4	160	150	94	114	171	172	200	178	123	116	177	157
5-9	674	632	328	336	678	701	712	617	527	533	648	625
10-14	634	694	329	321	634	895	817	704	856	843	863	858
15-19	489	571	295	284	940	874	526	556	1006	1014	937	992
20-24	514	521	298	394	680	725	376	515	1378	1065	782	916
25-29	640	726	468	533	454	488	398	546	1336	1001	561	724
30-34	715	813	442	437	463	563	380	426	719	641	332	433
35-39	724	805	325	363	572	668	331	435	497	557	274	421
40-44	696	886	255	413	739	823	345	386	540	638	314	408
45-49	641	827	297	326	699	884	296	328	716	888	254	420
50-54	641	794	279	314	717	942	269	343	860	1001	262	343
55-59	648	820	220	250	670	889	266	292	832	1027	254	301
60-64	611	745	131	172	687	969	222	322	727	1121	214	315
65-69	562	730	124	123	738	1106	157	199	790	1235	201	272
70-74	401	582	49	72	923	1093	111	163	917	1391	168	267
75-79*	440	547	49	43	793	979	119	184	960	1458	132	175
80-84*	0	0	0	0	507	669	58	59	824	1106	61	113
85-UP	71	72	6	15	266	339	25	30	408	677	38	47
TOTALS	9838	11605	4098	4646	11744	13898	5504	6249	14239	16758	6500	7830
GRAND TOTAL				30187				37395				45327

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1950-61			1969-71		
	OBSERVED	756.0	1565.0	2339.0	1565.0	2339.0	OBSERVED	756.0	1565.0
TOTAL	EXPECTED*	750.0	1781.5	2499.8	1781.5	2499.8	EXPECTED*	750.0	1781.5
	OBS/EXP	1.008	0.878	0.936	1.008	0.878	OBS/EXP	1.008	0.878
CV-RENAL	OBSERVED	410.0	886.0	1264.0	886.0	1264.0	OBSERVED	410.0	886.0
	EXPECTED*	424.2	1050.4	1553.7	1050.4	1553.7	EXPECTED*	424.2	1050.4
	OBS/EXP	0.967	0.843	0.814	0.967	0.843	OBS/EXP	0.967	0.843
HEART	OBSERVED	287.0	620.0	896.0	620.0	896.0	OBSERVED	287.0	620.0
	EXPECTED*	294.7	725.5	1074.1	725.5	1074.1	EXPECTED*	294.7	725.5
	OBS/EXP	0.974	0.855	0.848	0.974	0.855	OBS/EXP	0.974	0.855
NON CV-R	OBSERVED	346.0	679.0	1075.0	679.0	1075.0	OBSERVED	346.0	679.0
	EXPECTED*	325.7	731.2	946.1	731.2	946.1	EXPECTED*	325.7	731.2
	OBS/EXP	1.062	0.929	1.136	1.062	0.929	OBS/EXP	1.062	0.929
CANCER	OBSERVED	118.0	292.0	435.0	292.0	435.0	OBSERVED	118.0	292.0
	EXPECTED*	116.4	268.5	358.9	268.5	358.9	EXPECTED*	116.4	268.5
	OBS/EXP	1.014	1.088	1.212	1.014	1.088	OBS/EXP	1.014	1.088

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	FLORIDA
1950 RANK BY POPULATION	397
1950 POP/SQ. MILE	3354
1970 POP/SQ. MILE	1988
1949 MED. FAM. INCOME	2268
1969 MED. FAM. INCOME	6833
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	59
JAN MEAN TEMPERATURE	59
JULY MEAN TEMPERATURE	80
MEAN ANNUAL PRECIPITATION	51
LAND RESOURCES REGION	U
WATER RESOURCES	GROUND
TOTAL HARDNESS	82 PPM
NON-CARBONATE HARDNESS	24 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1966

PORT LAUDERDALE

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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					1960					1970				
	WM	WF	NM	NF		WM	WF	NM	NF		WM	WF	NM	NF	
TOTAL	13169	14662	4104	4413		29879	34151	9432	10185		55728	63144	9889	10829	
GRAND TOTAL									83648					139530	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED EXPECTED* OBS/EXP	715.0 700.0 1.021	2820.0 2978.6 0.947
CV-RENAL	OBSERVED EXPECTED* OBS/EXP	355.0 372.0 0.954	1448.0 1647.4 0.879
HEART	OBSERVED EXPECTED* OBS/EXP	246.0 264.3 0.931	1025.0 1175.1 0.872
NON CV-R	OBSERVED EXPECTED* OBS/EXP	360.0 328.0 1.098	1372.0 1331.2 1.031
CANCER	OBSERVED EXPECTED* OBS/EXP	126.0 112.6 1.119	492.0 486.5 1.011

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950					1960					1970				
	1949	1950	1959	1960	1961	1959	1960	1961	1969	1971	1970	1971	1971	1971	1971
TOTAL	355	360	887	934	999	2820	2820	2820	1905	1964	1953	1964	1964	1964	1964
CV-RENAL	169	186	355	443	525	1448	1448	1448	966	1037	1037	990	990	990	990
HEART	112	134	304	347	374	1025	1025	1025	697	719	719	697	697	697	697
NON CV-R	186	174	444	454	474	1372	1372	1372	939	916	916	974	974	974	974
CANCER	65	61	163	154	175	492	492	492	391	371	371	409	409	409	409

CITY CHARACTERISTICS

STATE	FLORIDA
1950 RANK BY POPULATION	330
1950 POP/SQ. MILE	1943
1970 POP/SQ. MILE	4716
1949 MED. FAM. INCOME	3041
1969 MED. FAM. INCOME	9865
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	68
JULY MEAN TEMPERATURE	81
MEAN ANN. PRECIPITATION	65
LAND RESOURCE REGION	U
WATER SOURCE	GROUND
TOTAL HARDNESS	56 PPM
NON-CARBONATE HARDNESS	18 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	12297	8732	2718	3114	12062	10616	3269	3754	12658	25480	5804	6658
GRAND TOTAL			26861	26861				29701				64510

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949		1950		49-50		1959		1960		1961		59-61	
	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF
TOTAL	168	217	168	217	385	240	240	240	241	258	258	258	739	739
CV-RENAL	82	104	82	104	186	118	118	118	116	111	111	111	345	345
HEART	48	58	48	58	106	76	76	76	64	75	75	75	215	215
NON CV-R	86	113	86	113	199	122	122	122	125	147	147	147	394	394
CANCER	17	32	17	32	49	35	35	35	42	45	45	45	122	122

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	385.0	331.5	1.161	739.0	625.6	1.181
CV-RENAL	186.0	153.8	1.209	345.0	304.8	1.132
HEART	106.0	105.0	1.010	215.0	207.7	1.035
NON CV-R	199.0	177.7	1.120	394.0	320.8	1.228
CANCER	49.0	46.7	1.048	122.0	88.0	1.387

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	FLORIDA	CODE
1950 RANK BY POPULATION	455	
1950 POP/SQ. MILE	4884	
1970 POP/SQ. MILE	2472	
1949 MED. FAM. INCOME	2500	
1969 MED. FAM. INCOME	8655	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	57	
JULY MEAN TEMPERATURE	81	
MEAN ANN. PRECIPITATION	48	
LAND RESOURCE REGION	P	
WATER SOURCE	GROUND	
TOTAL HARDNESS	57 PPM	
NON-CARBONATE HARDNESS	10 PPM	
FLUORIDATION STATUS	FLUORIDATED IN 1949	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	NP
IT 1	1369	1269	848	887	1308	1147	1212	1260	3647	3394	1231	1233	3647	3394	1231	1233	3647	3394
1-4	5185	5249	3254	3295	4015	3961	4643	4613	13572	12501	4875	5024	13572	12501	4875	5024	13572	12501
5-9	4853	4904	2951	3036	4758	4690	4733	4993	19836	19042	7631	7716	19836	19042	7631	7716	19836	19042
10-14	3869	3934	2415	2659	4968	4863	3865	3952	20783	19987	6070	6434	20783	19987	6070	6434	20783	19987
15-19	3512	4453	2101	2640	3914	5008	2712	2979	20163	18416	6070	6434	20163	18416	6070	6434	20163	18416
20-24	4796	6434	2358	3390	4136	4481	4483	2903	24037	18122	5506	3062	24037	18122	5506	3062	24037	18122
25-29	5935	6867	2843	3771	3268	3230	2203	2649	13486	12753	2965	3835	13486	12753	2965	3835	13486	12753
30-34	5408	5594	2403	3664	3244	3633	2221	3132	11467	11723	2732	3664	11467	11723	2732	3664	11467	11723
35-39	5632	5765	3009	3693	3765	4193	2358	2934	12445	13399	2832	3621	12445	13399	2832	3621	12445	13399
40-44	4380	4518	2553	2707	3892	4387	2383	2874	12599	13350	2778	3369	12599	13350	2778	3369	12599	13350
45-49	3798	4023	1917	1939	3706	4181	2117	2280	10792	11278	2668	3209	10792	11278	2668	3209	10792	11278
50-54	3706	3730	1339	1269	3220	3655	1841	2073	8653	9576	2368	2862	8653	9576	2368	2862	8653	9576
55-59	2405	2545	901	907	2643	3181	1230	1853	6797	8359	2009	2389	6797	8359	2009	2389	6797	8359
60-64	1811	2291	836	1044	2085	2860	1002	1272	4811	6461	1716	2235	4811	6461	1716	2235	4811	6461
65-69	1155	1582	467	516	1549	2078	632	826	3249	5024	1040	1306	3249	5024	1040	1306	3249	5024
70-74	908	1510	337	435	991	1506	376	485	2030	3496	535	862	2030	3496	535	862	2030	3496
75-79	0	0	0	0	440	889	167	217	1053	2075	270	483	1053	2075	270	483	1053	2075
80-84	148	245	46	76	211	481	105	162	679	1493	270	412	679	1493	270	412	679	1493
85-UP	62611	69377	33657	38872	55797	62489	38733	44011	203290	204405	56692	64478	203290	204405	56692	64478	203290	204405
TOTALS																		
GRAND TOTAL																		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	4579.0	7393.0	1.60		4579.0	7393.0	1.60		4579.0	7393.0	1.60	
	3445.8	6370.7	1.80		3445.8	6370.7	1.80		3445.8	6370.7	1.80	
	1.329	1.604			1.329	1.604			1.329	1.604		
CV-RENAL	2003.0	3658.0	1.171		2003.0	3658.0	1.171		2003.0	3658.0	1.171	
	1710.6	3338.1	1.096		1710.6	3338.1	1.096		1710.6	3338.1	1.096	
	1.171	1.096			1.171	1.096			1.171	1.096		
HEART	1221.0	2345.0	1.034		1221.0	2345.0	1.034		1221.0	2345.0	1.034	
	1181.1	2283.2	1.027		1181.1	2283.2	1.027		1181.1	2283.2	1.027	
	1.034	1.027			1.034	1.027			1.034	1.027		
NON CV-R	2576.0	3735.0	1.485		2576.0	3735.0	1.485		2576.0	3735.0	1.485	
	1735.2	3032.7	1.232		1735.2	3032.7	1.232		1735.2	3032.7	1.232	
	1.485	1.232			1.485	1.232			1.485	1.232		
CANCER	543.0	1062.0	1.042		543.0	1062.0	1.042		543.0	1062.0	1.042	
	520.9	941.9	1.127		520.9	941.9	1.127		520.9	941.9	1.127	
	1.042	1.127			1.042	1.127			1.042	1.127		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	CODE
FLORIDA	49
1950 RANK BY POPULATION	6772
1950 POP./SQ. MILE	690
1970 POP./SQ. MILE	2676
1949 MED. F.A.H. INCOME	8671
1969 MED. F.A.H. INCOME	CENTRAL
URBAN CLASS	51
1950 URBAN AREA RANK	57
JAN MEAN TEMPERATURE	51
JULY MEAN TEMPERATURE	52
MEAN ANN. PRECIPITATION	52
LAND RESOURCE REGION	GROUND
WATER SOURCE	270
TOTAL HARVEST	270
POPULATION DENSITY	140
POPULATION STATUS	NO ARTIFICIAL OPTIMUM NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	14016	9397	1544	1476	16796	13158	2076	1926	12670	11248	1816	1829
GRAND TOTAL				28433				33956				27563

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	394.0	743.0	801.0	329.5	676.3	670.0	394.0	743.0	801.0
	1.196	1.099	1.195						
CV-RENAL	147.0	338.0	345.0	156.5	321.1	352.3	147.0	338.0	345.0
	0.939	1.053	0.979						
HEART	94.0	210.0	244.0	109.7	226.4	248.0	94.0	210.0	244.0
	0.857	0.927	0.984						
NON CV-R	247.0	405.0	456.0	172.9	355.2	317.7	247.0	405.0	456.0
	1.429	1.140	1.435						
CANCER	70.0	117.0	141.0	47.9	98.4	103.0	70.0	117.0	141.0
	1.463	1.189	1.368						

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CITY

STATE	FLORIDA
1950 POP/50. MILE	459
1970 POP/50. MILE	6147
1949 MED. FAM. INCOME	6723
1969 MED. FAM. INCOME	2744
URBAN CLASS	6918
1950 URBAN AREA RANK	INDEPENDENT
JAN. HAN. PRECIPITATION	70
JULY HAN. PRECIPITATION	83
LAND RESOURCE REGION	U
WATER SOURCE	GROUND
TOTAL HARDNESS	60 BPM
NON-CARBONATE HARDNESS	10 BPM
FLUORIDATION STATUS	UNCERTAIN

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

AGE GROUP	1950						1960						1970				CAUSE	1949-50	1959-61	1969-71		
	WM			WF			WM			WF			WM			WF						
	NH	NP	NF	NH	NP	NF	NH	NP	NF	NH	NP	NF	NH	NP	NF	NH					NP	NF
LT 1	218	191	69	266	248	130	222	188	110	100												
1-4	869	796	245	1049	1078	511	763	748	382	371												
5-9	876	878	237	1354	1349	525	1212	1143	525	588												
10-14	774	791	229	1384	1299	410	1383	1261	587	617												
15-19	705	893	210	1424	1424	258	1453	1616	469	524												
20-24	1215	1038	231	1058	1014	269	1128	1289	245	332												
25-29	964	940	263	731	775	240	853	873	217	295												
30-34	836	929	216	878	994	203	684	799	201	247												
35-39	826	925	236	961	1091	248	872	986	195	261												
40-44	731	874	259	980	1053	272	936	1051	198	244												
45-49	745	815	234	842	1058	257	874	1019	218	232												
50-54	590	716	159	590	824	207	816	1011	203	238												
55-59	569	668	165	624	924	189	723	1076	177	160												
60-64	538	637	181	624	843	107	673	1008	163	181												
65-69	451	601	92	716	863	120	604	978	91	107												
70-74	408	492	50	469	521	46	326	508	26	45												
75-79	448	463	43	253	336	17	326	508	26	45												
80-84	0	0	0	253	336	17	326	508	26	45												
85-89	52	62	7	146	171	19	199	334	16	24												
TOTALS	11815	12789	2944	15544	17240	4088	14919	17351	4392	4888												
GRAND TOTAL																						

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50		1959		1960		1961		59-61		1969		1970		1971		69-71		STATE	FLORIDA
	1949	1950	1950	1959	1960	1961	SUM	1969	1970	1971	SUM	1969	1970	1971	SUM	1969	1971	1950 RANK BY POPULATION		
TOTAL	340	378	718	473	503	481	1457	629	592	676	1897								388	2706
CV-RENAL	184	220	404	283	266	271	820	332	289	329	950								1370	3298
HEART	135	160	295	176	186	181	543	227	182	216	625								1949	2655
NON CV-R	156	158	314	190	237	210	637	293	303	347	943								1969	8174
CANCER	53	59	112	71	88	91	250	88	95	116	299								URBAN CLASS	INDEPENDENT
																			1950	
																			URBAN AREA RANK	
																			JAN MEAN TEMPERATURE	62
																			JULY MEAN TEMPERATURE	81
																			MEAN ANN. PRECIPITATION	51
																			LAND RESOURCE REGION	0
																			WATER SOURCE	GROUND
																			TOTAL HARDNESS	241 PPM
																			NON-CARBONATE HARDNESS	37 PPM
																			FLUORIDATION STATUS	NO ARTIFICIAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	1534	1477	439	459	1577	1502	1154	1109	1355	1268	916	854
5-4	6312	6015	1535	1613	5334	5109	4007	4016	4838	4678	3426	3585
5-9	6537	6027	1496	1508	6429	6259	3582	3606	7911	7789	4533	4378
10-14	5173	5025	1272	1401	6906	6778	2439	2497	8026	7640	4196	4365
15-19	4679	5060	1116	1349	5953	6602	1923	2183	8110	8529	3484	3749
20-24	6753	7345	1724	2128	6192	6581	2879	3268	7506	9379	2857	3781
25-29	8093	8989	2046	2421	6491	6036	3048	3150	6790	7640	2774	3133
30-34	8107	9390	1912	2299	6862	7184	2741	2881	6867	7415	2676	2927
35-39	8617	9838	1978	2162	7266	8070	2372	2579	7417	8008	2469	2727
40-44	8957	9528	1749	1758	7765	8778	2042	2131	8735	9646	2261	2497
45-49	8383	8383	1521	1465	8462	9631	1830	1825	8421	9834	1829	2101
50-54	7677	7598	991	1027	8356	9232	1329	1360	8345	9922	1545	1761
55-59	6355	6329	597	648	8078	8579	1129	1189	8249	10281	1374	1514
60-64	5298	5513	383	383	7162	7884	629	669	7806	9789	1013	1298
65-69	4041	4482	298	328	6504	7041	502	535	6939	8767	873	1105
70-74	2692	3012	141	164	5162	5375	284	340	5033	6610	494	642
75-79*	2381	2667	89	120	2921	3255	152	171	2051	3097	121	197
80-84*	0	0	0	0	1322	1654	60	70	1140	1905	169	152
85-UP	324	409	27	29	661	935	45	55	119177	137200	37202	41280
TOTALS	101613	107087	19314	21262	109403	116485	32147	33653	119177	137200	37202	41280
GRAND TOTAL				249276				291688				334859

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	TOTAL	OBSERVED	TOTAL	OBSERVED	TOTAL	OBSERVED
CV-RENAL		EXPECTED*		EXPECTED*		EXPECTED*
		OBS/EXP		OBS/EXP		OBS/EXP
CV-RENAL		2434.0		5452.0		6467.0
		2535.1		6042.5		8248.7
		0.960		0.902		0.784
HEART		1748.0		3948.0		4775.0
		1818.0		4290.8		5733.7
		0.962		0.920		0.833
NON CV-R		2515.0		5481.0		7293.0
		2179.4		4749.3		5698.0
		1.154		1.154		1.280
CANCER		846.0		1966.0		2703.0
		784.7		1737.1		2156.5
		1.076		1.132		1.253

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	FLORIDA		FLORIDA	
	STATE	1950 RANK BY POPULATION	STATE	1950 RANK BY POPULATION
CV-RENAL	42	7289	42	7289
	1970 POP/SQ. MILE	763	1970 POP/SQ. MILE	763
	1949 MED. FAM. INCOME	3004	1949 MED. FAM. INCOME	3004
HEART	7304	7304	7304	7304
	1969 MED. FAM. INCOME	7304	1969 MED. FAM. INCOME	7304
	URBAN CLASS	CENTRAL	URBAN CLASS	CENTRAL
NON CV-R	28	28	28	28
	1950 URBAN AREA RANK	28	1950 URBAN AREA RANK	28
	JAN MEAN TEMPERATURE	68	JAN MEAN TEMPERATURE	68
CANCER	81	81	81	81
	JULY MEAN TEMPERATURE	81	JULY MEAN TEMPERATURE	81
	MEAN ANN. PRECIPITATION	47	MEAN ANN. PRECIPITATION	47
CANCER	U	U	U	U
	LAND RESOURCE REGION	U	LAND RESOURCE REGION	U
	WATER SOURCE	GROUND	WATER SOURCE	GROUND
CANCER	79 PPM	79 PPM	79 PPM	79 PPM
	TOTAL HAPDFSS	79 PPM	TOTAL HAPDFSS	79 PPM
	NON-CARBONATE HARDNESS	34 PPM	NON-CARBONATE HARDNESS	34 PPM
CANCER	FLUORIDATION STATUS	FLUORIDATED IN 1952	FLUORIDATION STATUS	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960		
	WM	WF	NM	WM	WF	NM
LT 1	188	174	0	184	164	0
1-4	1018	925	0	654	632	2
5-9	1139	1098	2	1052	1085	5
10-14	921	841	11	1456	1464	2
15-19	907	882	9	1233	1262	4
20-24	1059	1319	17	948	1036	10
25-29	1101	1551	15	928	1049	14
30-34	1282	1923	26	1050	1327	10
35-39	1625	2327	31	77	1782	13
40-44	1765	2277	23	1255	1782	7
45-49	1926	2163	28	1987	2688	21
50-54	1979	2351	23	2201	2852	16
55-59	1729	2059	7	2516	3301	31
60-64	1662	1871	4	2748	4107	20
65-69	1327	1528	7	3478	4061	8
70-74	807	779	1	3051	2794	1
75-79*	590	445	0	1633	1281	1
80-84*	0	0	0	584	400	1
85-UP	56	48	0	255	162	2
TOTALS	21081	24561	201	28871	33706	158
GRAND TOTAL			46282			63145

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1959-71
TOTAL			
OBSERVED	704.0	2911.0	6245.0
EXPECTED*	1025.0	3767.8	8857.2
OBS/EXP	0.687	0.773	0.705
CV-RENAL			
OBSERVED	416.0	1802.0	3824.0
EXPECTED*	578.1	2306.1	5802.4
OBS/EXP	0.720	0.781	0.659
HEART			
OBSERVED	348.0	1458.0	3090.0
EXPECTED*	427.1	1670.0	4041.9
OBS/EXP	0.815	0.873	0.764
NON CV-R			
OBSERVED	288.0	1109.0	2421.0
EXPECTED*	446.9	1461.7	3055.8
OBS/EXP	0.644	0.759	0.793
CANCER			
OBSERVED	117.0	530.0	1241.0
EXPECTED*	193.1	671.0	1377.5
OBS/EXP	0.606	0.790	0.901

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50	1959	1960	1961	59-61	1969	1970	1971	59-71	SUM
TOTAL	341	363	704	901	956	1054	2911	1946	2056	2243	6245	
CV-RENAL	199	217	416	550	592	660	1802	1264	1264	1356	3824	
HEART	169	179	348	453	480	525	1458	973	1019	1098	3090	
NON CV-R	42	146	288	351	364	394	1109	742	792	887	2421	
CANCER	57	60	117	181	161	188	530	381	390	470	1241	

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION
FLORIDA	255
ALABAMA	6428
MISSISSIPPI	13605
LOUISIANA	3510
ARKANSAS	7099
OKLAHOMA	28
KENTUCKY	70
TENNESSEE	82
MICHIGAN	42
MINNESOTA	U
WISCONSIN	U
ILLINOIS	U
INDIANA	U
PENNSYLVANIA	U
DELAWARE	U
MARYLAND	U
VIRGINIA	U
NORTH CAROLINA	U
SOUTH CAROLINA	U
GEORGIA	U
FLORIDA	U
ALABAMA	U
MISSISSIPPI	U
LOUISIANA	U
ARKANSAS	U
OKLAHOMA	U
KENTUCKY	U
TENNESSEE	U
MICHIGAN	U
MINNESOTA	U
WISCONSIN	U
ILLINOIS	U
INDIANA	U
PENNSYLVANIA	U
DELAWARE	U
MARYLAND	U
VIRGINIA	U
NORTH CAROLINA	U
SOUTH CAROLINA	U
GEORGIA	U
FLORIDA	U
ALABAMA	U
MISSISSIPPI	U
LOUISIANA	U
ARKANSAS	U
OKLAHOMA	U
KENTUCKY	U
TENNESSEE	U
MICHIGAN	U
MINNESOTA	U
WISCONSIN	U
ILLINOIS	U
INDIANA	U
PENNSYLVANIA	U
DELAWARE	U
MARYLAND	U
VIRGINIA	U
NORTH CAROLINA	U
SOUTH CAROLINA	U
GEORGIA	U
FLORIDA	U
ALABAMA	U
MISSISSIPPI	U
LOUISIANA	U
ARKANSAS	U
OKLAHOMA	U
KENTUCKY	U
TENNESSEE	U
MICHIGAN	U
MINNESOTA	U
WISCONSIN	U
ILLINOIS	U
INDIANA	U
PENNSYLVANIA	U
DELAWARE	U
MARYLAND	U
VIRGINIA	U
NORTH CAROLINA	U
SOUTH CAROLINA	U
GEORGIA	U
FLORIDA	U
ALABAMA	U
MISSISSIPPI	U
LOUISIANA	U
ARKANSAS	U
OKLAHOMA	U
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MICHIGAN	U
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WISCONSIN	U
ILLINOIS	U
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PENNSYLVANIA	U
DELAWARE	U
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VIRGINIA	U
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SOUTH CAROLINA	U
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MISSISSIPPI	U
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MINNESOTA	U
WISCONSIN	U
ILLINOIS	U
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PENNSYLVANIA	U
DELAWARE	U
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ILLINOIS	U
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DELAWARE	U
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SOUTH CAROLINA	U
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PENNSYLVANIA	U
DELAWARE	U
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MINNESOTA	U
WISCONSIN	U
ILLINOIS	U
INDIANA	U
PENNSYLVANIA	U
DELAWARE	U
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OKLAHOMA	U
KENTUCKY	U
TENNESSEE	U
MICHIGAN	U
MINNESOTA	U
WISCONSIN	U
ILLINOIS	U
INDIANA	U
PENNSYLVANIA	U
DELAWARE	U
MARYLAND	U
VIRGINIA	U
NORTH CAROLINA	U
SOUTH CAROLINA	U

NON-CARBONATE HARDNESS
34 PER
FLUORIDATION STATUS
FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1T 1	348	232	163	155	582	622	318	335	418	374	366	357
1-4	1278	1289	562	574	2386	2277	1239	1200	1527	1318	1492	1020
5-9	1318	1337	518	522	2502	2356	1433	1260	2227	2166	1824	1932
10-14	1041	1078	431	460	2029	2036	1071	958	2596	2538	1761	1748
15-19	857	1084	311	341	1629	2162	631	731	4684	2963	1781	1505
20-24	394	1013	277	316	2015	2062	820	835	3687	2965	1282	1240
25-29	1345	1513	202	216	2083	1904	851	876	2010	1908	897	1124
30-34	1352	1559	602	629	2088	2306	775	851	1340	1484	827	963
35-39	1387	1619	600	629	2388	2592	679	743	1459	1620	719	880
40-44	1397	1702	555	572	2269	2341	602	647	1868	2157	713	852
45-49	1203	1458	425	447	1977	2179	593	560	2160	2542	605	651
50-54	1118	1323	355	323	1767	2037	482	477	2135	2350	548	637
55-59	968	1225	241	196	1490	1869	383	396	1777	2227	479	513
60-64	878	1224	135	137	1306	1809	242	260	1565	2150	402	482
65-69	855	1053	152	190	1292	1907	205	208	1335	2058	304	362
70-74	720	858	70	66	1223	1677	113	139	1172	1940	179	230
75-79*	644	849	38	56	830	1051	80	72	880	1504	86	125
80-84*	0	0	0	0	440	627	17	32	531	934	47	76
85-UP	108	144	11	15	199	339	15	38	344	598	39	67
TOTALS	17804	21176	6411	6976	31825	35608	10095	10607	33717	35794	14331	15164
GRAND TOTAL				52367				88135				99006

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1335.0	1186.2	1.125		2981.0	3069.7	0.971		3758.0	3850.4	0.976	
CV-RENAL												
OBSERVED	751.0				1610.0				1946.0			
EXPECTED*	660.5				1728.2				2257.6			
OBS/EXP	1.137				0.932				0.862			
HEART												
OBSERVED	523.0				1133.0				1339.0			
EXPECTED*	460.7				1201.0				1545.5			
OBS/EXP	1.135				0.943				0.866			
NON CV-R												
OBSERVED	584.0				1371.0				1812.0			
EXPECTED*	525.7				1341.4				1592.8			
OBS/EXP	1.111				1.022				1.138			
CANCER												
OBSERVED	190.0				505.0				635.0			
EXPECTED*	184.1				463.5				561.5			
OBS/EXP	1.032				1.090				1.131			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	FLORIDA		
1950 BANK BY POPULATION	219		
1950 POP/50. MILE	3714		
1970 POP/50. MILE	3600		
1949 MED. FAM. INCOME	2685		
1969 MED. FAM. INCOME	7945		
URBAN CLASS	CENTRAL		
1950 URBAN AREA RANK	152		
JAN MEAN TEMPERATURE	61		
JULY MEAN TEMPERATURE	82		
MEAN ANN. PRECIPITATION	51		
LAND RESOURCE REGION	U		
WATER SOURCE	GROUND AND SURFACE		
TOTAL HARDNESS	123 PPM		
NON-CARBONATE HARDNESS	47 PPM		
FLUORIDATION STATUS	FLUORIDATED IN 1956		

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	337.0	310.7	1.085	849.0	720.7	1.178	1101.0	958.2	1.149
CV-RENAL	130.0	137.2	0.948	365.0	345.6	1.056	475.0	527.9	0.900
HEART	83.0	96.3	0.862	241.0	242.0	0.996	319.0	365.5	0.873
NON CV-R	207.0	173.5	1.193	484.0	375.1	1.290	626.0	436.3	1.435
CANCER	40.0	40.7	0.894	141.0	106.6	1.323	205.0	146.7	1.398

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	FLORIDA		
1950 RANK BY POPULATION	469		
1950 POP/SQ. MILE	1926		
1970 POP/SQ. MILE	2326		
1949 MED. FAM. INCOME	2643		
1969 MPD. FAM. INCOME	7292		
URBAN CLASS	INDEPENDENT		
1950 URBAN AREA RANK	-		
JAN MEAN TEMPERATURE	53		
JULY MEAN TEMPERATURE	81		
MEAN ANN. PRECIPITATION	58		
LAND RESOURCE REGION	T		
WATER SOURCE	GROUND		
TOTAL HARDNESS	158 PPM		
NON-CARBONATE HARDNESS	18 PPM		
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	9946	10175	2679	3014	12526	12856	3626	4267	11636	12589	3641	4230
GRAND TOTAL				25614				33275				32096
1-4	1166	1075	343	288	1256	1148	477	523	1311	1190	480	552
5-9	1018	942	297	314	1325	1365	537	580	1174	1190	552	559
10-14	766	701	272	276	1311	1206	458	429	1116	1132	445	480
15-19	529	704	193	253	911	1002	292	348	960	1105	214	261
20-24	759	1035	198	282	884	965	223	305	839	784	127	204
25-29	1040	1220	217	303	933	894	182	282	839	784	127	204
30-34	1026	960	191	256	955	993	188	288	598	676	147	245
35-39	852	854	239	281	969	1037	194	287	594	640	154	210
40-44	717	612	188	203	778	856	200	272	662	818	174	242
45-49	498	476	139	152	773	802	202	214	773	832	198	244
50-54	390	351	98	82	646	610	167	189	709	773	178	232
55-59	270	276	55	63	439	467	142	168	661	748	168	208
60-64	218	245	54	56	346	369	63	73	547	637	159	169
65-69	164	196	45	70	253	311	70	77	366	449	99	137
70-74	125	128	29	26	200	235	42	53	260	377	54	68
75-79#	82	117	32	28	121	157	16	34	153	248	32	45
80-84#	0	0	0	0	55	83	9	12	79	162	16	22
85-UP	11	17	4	3	35	36	12	16	62	122	11	24
TOTALS	9946	10175	2679	3014	12526	12856	3626	4267	11636	12589	3641	4230
GRAND TOTAL				25614				33275				32096

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	173	164	337		268	305	276	849	365	364	372	1101
CV-RENAL	69	61	130		114	122	129	365	168	156	151	475
HEART	47	36	83		71	83	87	241	121	102	96	319
NON CV-R	104	103	207		154	183	147	484	197	208	221	626
CANCER	14	26	40		45	42	54	141	56	65	84	205

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	305	280	223	210	421	402	280	306	335	323	178	175
1-4	1130	1112	764	771	1689	1603	1100	1101	1106	1056	778	761
5-9	1147	1112	730	745	1935	1916	1170	1112	1891	1825	1224	1166
10-14	917	941	580	636	1734	1813	952	709	1723	1873	1032	1032
15-19	894	1044	566	630	1248	1466	529	645	1683	1958	1041	762
20-24	1168	1403	576	840	1348	1243	558	658	1263	1314	415	555
25-29	1226	1317	562	807	1382	1460	518	679	965	1052	416	570
30-34	1004	1109	581	333	1526	1522	487	703	998	1123	395	661
35-39	1027	1109	576	824	1264	1410	531	620	1151	1387	496	647
40-44	704	966	423	491	1204	1204	480	609	1277	1383	440	566
45-49	638	862	300	377	965	1080	417	519	1183	1269	472	542
50-54	600	704	226	258	811	927	330	427	960	1092	404	559
55-59	692	519	170	222	615	782	208	269	761	1026	340	475
60-64	380	461	161	257	558	732	173	271	542	888	254	442
65-69	254	324	105	126	387	480	127	181	421	722	160	210
70-74	192	307	83	98	242	341	95	122	324	538	92	137
75-79*	0	0	0	0	97	191	38	51	159	283	44	90
80-84*	0	0	0	0	56	129	20	39	100	207	42	85
85-UP	32	41	18	20								
TOTALS	13167	14469	7168	8675	18080	19990	8654	10028	18512	21027	9092	10876
GRAND TOTAL			43479	56752								59507

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL												
CV-RENAL	431-0	881-0	1069-0		431-0	881-0	1069-0		431-0	881-0	1069-0	
	352-7	780-5	1046-8		352-7	780-5	1046-8		352-7	780-5	1046-8	
	1-222	1-129	1-021		1-222	1-129	1-021		1-222	1-129	1-021	
HEART	303-0	643-0	784-0		303-0	643-0	784-0		303-0	643-0	784-0	
	242-7	536-9	712-7		242-7	536-9	712-7		242-7	536-9	712-7	
	1-248	1-198	1-100		1-248	1-198	1-100		1-248	1-198	1-100	
NON CV-R	521-0	796-0	986-0		521-0	796-0	986-0		521-0	796-0	986-0	
	365-9	746-8	832-1		365-9	746-8	832-1		365-9	746-8	832-1	
	1-424	1-066	1-185		1-424	1-066	1-185		1-424	1-066	1-185	
CANCER	118-0	225-0	326-0		118-0	225-0	326-0		118-0	225-0	326-0	
	106-3	224-9	280-1		106-3	224-9	280-1		106-3	224-9	280-1	
	1-110	1-000	1-164		1-110	1-000	1-164		1-110	1-000	1-164	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS				CODE			
STATE				FLORIDA			
1950 POP/100 SQ. MILE				271			
1970 POP/100 SQ. MILE				5876			
1949 MED. FAM. INCOME				2431			
1969 MED. FAM. INCOME				8319			
URBAN CLASS				INDEPENDENT			
1950 URBAN AREA RANK				54			
JAN MEAN TEMPERATURE				81			
JULY MEAN TEMPERATURE				61			
MEAN ANN. PRECIPITATION				T			
LAND RESOURCE REGION				GROUND			
WATER SOURCE				20 PPM			
TOTAL HARDNESS				11 PPM			
NON-CARBONATE HARDNESS				UNCERTAIN			
FLUORIDATION STATUS							

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP	WM	NP
LT 1	449	444	142	142	3648	3504	381	429	781	810	1534	355	3049	2808	4741	1465	810	423
1-4	1996	2017	552	632	4769	4740	1443	1531	4884	4741	2019	2016	4884	4741	2019	2016	4884	4741
5-9	2135	2092	594	622	4591	4803	1057	1086	5869	5731	1979	2060	5869	5731	1979	2060	5869	5731
10-14	1713	1698	526	581	3412	3574	782	922	5689	5767	1499	1660	5689	5767	1499	1660	5689	5767
15-19	1591	1703	431	478	2027	2258	979	1016	3984	4458	975	1335	3984	4458	975	1335	3984	4458
20-24	1495	1916	532	694	2027	2258	979	1016	3984	4458	975	1335	3984	4458	975	1335	3984	4458
25-29	1944	2378	517	658	3302	3656	859	1001	3284	3458	880	1162	3284	3458	880	1162	3284	3458
30-34	2125	2507	495	658	3162	3615	790	949	2733	3019	953	1156	2733	3019	953	1156	2733	3019
35-39	2120	2814	541	731	3760	4473	751	862	2981	3452	834	1037	2981	3452	834	1037	2981	3452
40-44	2286	2839	531	610	3756	4442	631	714	3890	4531	741	979	3890	4531	741	979	3890	4531
45-49	2252	2970	495	556	3579	4551	666	754	4495	5558	613	804	4495	5558	613	804	4495	5558
50-54	2486	3380	366	385	3776	5100	509	540	4565	5566	608	755	4565	5566	608	755	4565	5566
55-59	2532	3526	260	237	3942	6145	434	496	4183	6257	571	718	4183	6257	571	718	4183	6257
60-64	2611	3967	168	173	4952	8089	273	308	5119	8106	493	621	5119	8106	493	621	5119	8106
65-69	3033	4265	152	233	7698	9484	220	247	6750	9882	425	520	6750	9882	425	520	6750	9882
70-74	2905	3377	94	83	7434	8198	133	154	7508	10572	241	314	7508	10572	241	314	7508	10572
75-79*	2970	3281	54	64	4719	5127	77	104	6601	8360	137	195	6601	8360	137	195	6601	8360
80-84*	0	0	0	0	2215	2503	42	51	3836	5256	97	112	3836	5256	97	112	3836	5256
85-UP	420	488	4	25	1080	1328	24	30	2164	3068	83	98	2164	3068	83	98	2164	3068
TOTALS	37063	45662	6454	7559	71726	85384	11497	12691	82365	101400	15105	17362	82365	101400	15105	17362	82365	101400
GRAND TOTAL				96738				181298				216232						

* AS RECORDED IN 1950 ONLY, 75- 79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	2861.0	9401.0	0.806	3549.5	11577.0	0.812	13454.0	16543.5	0.813
CV-RENAL	1741.0	5794.0	0.797	2183.9	7221.7	0.802	8297.0	10754.9	0.771
HEART	1131.0	3873.0	0.741	1526.8	5053.2	0.766	5645.0	7347.3	0.768
NON CV-R	1120.0	3607.0	0.820	1365.6	4355.4	0.828	5157.0	5788.6	0.891
CANCER	434.0	1710.0	0.774	560.8	1808.2	0.946	2371.0	2362.1	1.004

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS						CODE	
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE 1950 RANK BY POPULATION		113
TOTAL	1367	1494	2861	2997	3290	3114	9401	4345	4522	4587	13454	1950 POP/SQ. MILE	1853	1853
CV-RENAL	827	914	1741	1821	2048	1925	5794	2717	2774	2806	8297	1970 POP/SQ. MILE	3903	3903
HEART	527	604	1131	1219	1411	1243	3874	1847	1876	1922	5645	1949 MED. P.M. INCOME	2459	2459
NON CV-R	540	580	1120	1176	1242	1189	3607	1628	1748	1781	5157	1969 MED. P.M. INCOME	7358	7358
CANCER	199	235	434	557	569	584	1710	693	856	822	2371	URBAN CLASS	CENTRAL	CENTRAL
												1950 URBAN AREA RANK	108	108
												JAN MEAN TEMPERATURE	63	63
												JULY MEAN TEMPERATURE	82	82
												MEAN ANN. PRECIPITATION	53	53
												LAND RESOURCE REGION	U	U
												WATER SOURCE	GROUND	GROUND
												TOTAL HARDNESS	105 PPM	105 PPM
												NON-CARBONATE HARDNESS	16 PPM	16 PPM
												FLUORIDATION STATUS	UNCERTAIN	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	153	166	117	117	355	314	212	208	445	415	168	168
1-4	632	591	432	439	1276	1217	781	866	1625	1453	618	612
5-9	534	531	335	449	1367	1396	857	897	2078	1974	863	861
10-14	423	400	335	373	1266	1217	761	714	1948	1908	1057	1099
15-19	430	478	403	413	1727	2575	867	958	2953	3672	1400	1521
20-24	830	1988	457	635	2193	2277	875	914	5078	5645	1199	1403
25-29	740	837	463	520	1273	1033	519	572	2684	2433	495	568
30-34	645	766	384	439	1047	1115	408	574	1633	1508	356	480
35-39	617	673	318	402	987	1044	429	537	1225	1168	317	445
40-44	568	634	287	306	868	992	391	519	1224	1370	352	540
45-49	505	522	237	281	797	901	380	433	1150	1307	358	472
50-54	352	387	142	176	684	782	295	373	1038	1178	389	481
55-59	251	360	106	136	509	591	246	295	822	1035	328	386
60-64	178	289	66	107	318	470	149	180	669	833	278	350
65-69	160	224	94	140	231	383	113	201	442	623	197	315
70-74	86	179	45	59	168	295	76	127	261	463	102	151
75-79*	92	151	32	64	106	188	58	69	169	329	43	82
80-84*	0	0	0	0	49	116	16	38	80	205	37	70
85-UP	12	19	8	15	36	72	18	33	55	137	38	63
TOTALS	7253	10611	4302	5071	15237	16978	7451	8508	25579	27656	8595	10067
GRAND TOTAL				27237				48174				71897

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	388.0	1031.0	1365.0
OBSERVED*	364.4	992.6	1484.1
EXPECTED*	1.065	1.039	0.920
CV-RENAL	183.0	479.0	585.0
OBSERVED	171.3	471.4	750.5
EXPECTED*	1.068	1.016	0.779
OBS/EXP			
HEART	113.0	281.0	342.0
OBSERVED	117.1	321.2	513.3
EXPECTED*	0.965	0.875	0.666
OBS/EXP			
NON CV-R	205.0	552.0	781.0
OBSERVED	193.0	521.2	733.6
EXPECTED*	1.062	1.059	1.065
OBS/EXP			
CANCER	37.0	148.0	232.0
OBSERVED	54.8	140.6	218.3
EXPECTED*	0.700	1.053	1.063
OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	
TOTAL	196	202	388	1031	445	459	462	1366	FLORIDA
CV-RENAL	87	96	183	479	194	191	200	585	1950 POP/SQ. MILE 4323
HEART	54	59	113	98	117	114	111	342	1970 POP/SQ. MILE 2755
NON CV-R	99	106	205	193	251	268	262	781	1949 MED. FAM. INCOME 2952
CANCER	20	17	37	44	80	78	74	232	1969 MED. FAM. INCOME 9078
									URBAN CLASS -
									1950 URBAN AREA RANK -
									JAN MEAN TEMPERATURE 53
									JULY MEAN TEMPERATURE 81
									MEAN ANN. PRECIPITATION 56
									LAND RESOURCE REGION F
									WATER SOURCE
									TOTAL HARDNESS 152 PPM
									NON-CARBONATE HARDNESS 10 PPM
									FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NP	WM	WF	NH	NP	WM	WF	NH	NP
LT 1	806	793	293	384	2172	2087	711	701	1668	1570	613	639
1-4	3546	3382	1113	1194	8968	8692	2706	2632	6001	5891	2475	2958
5-9	3545	3741	1103	1165	10665	10425	2750	2719	8887	8580	3341	3551
10-14	2732	3028	909	935	10074	9733	2006	2112	9772	9365	3388	3433
15-19	2732	3028	777	910	7151	8007	1543	1607	9379	9510	2682	2721
20-24	3225	4013	960	1354	5633	6527	1464	1647	10160	9356	1823	2265
25-29	3712	4202	1030	1364	6514	6833	1491	1623	6925	6836	1445	1905
30-34	3605	4116	961	1276	7317	8006	1382	1736	5266	5563	1428	1758
35-39	3693	4267	1119	1374	7784	8802	1412	1610	5474	5706	1344	1618
40-44	3524	3941	1102	1237	7615	8308	1354	1524	6155	7082	1230	1621
45-49	3267	3460	1135	1135	7274	7849	1313	1450	6725	7878	1217	1448
50-54	2832	3008	800	746	6472	6903	1220	1247	6621	7366	1171	1394
55-59	2628	2746	559	515	5631	6147	1124	1075	5905	6952	1034	1223
60-64	2212	2366	395	363	4651	5558	724	755	5142	6503	998	1108
65-69	1830	2133	351	409	4790	5263	611	611	4339	5716	886	1029
70-74	1241	1461	171	192	3758	4260	380	393	3396	4782	548	653
75-79*	1166	1368	152	161	2409	2605	224	264	2496	3508	253	350
80-84*	0	0	0	0	1024	1286	87	88	1385	2166	150	212
85-UP	183	231	17	39	536	745	67	93	776	1280	98	175
TOTALS	46525	50759	12964	14433	110438	118076	22569	23887	106472	115610	26124	29561
GRAND TOTAL				124681				274970				277767

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	3358.0	9064.0	10209.0
OBSERVED	2434.6	8725.1	10100.1
EXPECTED*	1.379	1.039	1.011
OBS/EXP			
CV-RENAL	1614.0	4399.0	4583.0
OBSERVED	1314.1	4824.9	5868.7
EXPECTED*	1.228	0.912	0.781
OBS/EXP			
HEART	1038.0	2929.0	2986.0
OBSERVED	924.0	3401.2	4065.9
EXPECTED*	1.123	0.861	0.734
OBS/EXP			
NON CV-R	1744.0	4665.0	5626.0
OBSERVED	1120.5	3900.2	4231.5
EXPECTED*	1.556	1.196	1.330
OBS/EXP			
CANCER	500.0	1443.0	1694.0
OBSERVED	387.6	1376.7	1541.5
EXPECTED*	1.290	1.048	1.099
OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1959	1960	1961	1969	1970	1971	1972
TOTAL	1659	2981	3084	2999	3373	3469	3367	3367
CV-RENAL	801	1417	1439	1543	1474	1583	1546	1583
HEART	536	959	921	1049	951	1008	1027	1008
NON CV-R	858	1564	1645	1456	1699	1906	1821	1906
CANCER	213	452	516	443	560	584	570	584
STATE								
1950 RANK BY POPULATION								
1950 POP/50. MILE								
1970 POP/50. MILE								
1949 MED. FAM. INCOME								
1969 MED. FAM. INCOME								
URBAN/RS. AREA RANK								
1950 MED. AREA RANK								
1970 MED. AREA RANK								
JAN. MEAN TEMPERATURE								
JULY MEAN TEMPERATURE								
MEAN ANNUAL PRECIPITATION								
LAND RESOURCE REGION								
WATER SOURCE								
TOTAL HARDNESS								
NON-CARBONATE HARDNESS								
FLUORIDATION STATUS								

NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

[illegible]

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUR	1959	1960	1961	59-61 SUR	1969	1970	1971	69-71 SUR
TOTAL	466	486	952	672	729	705	2106	974	942	971	2887
CV-RENAL	260	264	396	365	389	324	1150	529	487	497	1513
HEART	176	183	359	269	257	280	806	347	308	318	973
NON CV-R	206	222	428	340	340	309	956	445	455	474	1374
CANCER	59	61	120	131	137	125	373	182	184	183	549

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	FLORIDA
1950 BANK BY POPULATION	275
1950 POP/50. MILE	3721
1970 POP/50. MILE	1494
1949 MED. FAM. INCOME	2539
1969 MED. FAM. INCOME	8382
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	67
JULY MEAN TEMPERATURE	82
MEAN ANN. PRECIPITATION	61
LAND RESOURCE REGION	U
WATER SOURCE	SURFACE
TOTAL HARDNESS	60 ppm
NON-CARBONATE HARDNESS	39 ppm
FLUORINATION STATUS	NO ARTIFICIAL, LOW NATURAL

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	2068	1984	1450	1435	2976	2851	2555	2620	1957	1726	2628	2534
1-4	7835	7504	5113	5078	10825	10420	10210	10437	6366	5996	10873	10868
5-9	6986	6936	4772	4710	12504	11964	10981	11372	7996	7621	14360	14256
10-14	5648	5732	4294	4346	12206	12194	8410	8722	8521	8094	14373	14246
15-19	6864	7453	4293	5079	10687	11476	6391	7083	10521	8863	12373	13246
20-24	10172	10711	4629	6174	11773	12519	6165	7732	12572	13008	13273	13232
25-29	9749	10392	4800	5130	10266	9472	5749	7313	12572	13008	13273	13232
30-34	7940	8829	4447	4859	9863	10884	5549	7279	12572	13008	13273	13232
35-39	7656	8941	4367	4859	9792	10923	5128	6410	7305	6232	7898	8895
40-44	7318	7616	3300	4439	9435	10762	5106	6122	7064	6939	5843	7278
45-49	5643	6655	2906	3444	8974	10380	4060	4967	7204	8019	5138	6244
50-54	4582	5518	2022	2349	7496	9189	3320	4212	6841	7850	4718	6141
55-59	3605	4579	1258	1574	5788	7534	2275	3169	6311	7725	4307	5456
60-64	2660	3895	1240	1822	4411	6326	1939	2652	5424	7635	3360	4661
65-69	1692	2846	608	895	3077	4824	1186	1662	4066	6467	2514	4077
70-74	1471	2673	523	851	1784	3315	734	1031	2809	5412	1664	2617
75-79*	0	0	0	0	916	1915	269	486	961	3695	836	1517
80-84*	175	425	90	200	437	1122	203	411	548	2352	492	856
85-UP	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	98494	111404	54988	66428	142781	157854	86441	100379	114996	125507	118536	137934
GRAND TOTAL				331314				487455				496973

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	7099.0	14901.0	16490.0		5577.7	13841.7	1.063	
CV-RENAL								
OBSERVED	2776.2	7141.4	8351.9					
EXPECTED*								
OBS/EXP								
HEART								
OBSERVED	1906.3	4892.9	5609.2					
EXPECTED*								
OBS/EXP								
NON CV-R								
OBSERVED	2801.5	6700.4	7167.6					
EXPECTED*								
OBS/EXP								
CANCER								
OBSERVED	840.9	2055.8	2208.7					
EXPECTED*								
OBS/EXP								

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	3605	3484	7089	5010	5604	5615	5271	16490
CV-RENAL								
HEART								
NON CV-R								
CANCER								
					STATE			
					1950 RANK BY POPULATION			
					33			
					1950 POP/SQ. MILE			
					8979			
					1970 POP/SQ. MILE			
					3779			
					1949 MED. FAM. INCOME			
					2664			
					1969 MED. FAM. INCOME			
					8399			
					URBAN CLASS			
					24			
					1950 URBAN AREA RANK			
					44			
					JAN MEAN TEMPERATURE			
					79			
					JULY MEAN TEMPERATURE			
					49			
					MEAN ANN. PRECIPITATION			
					79			
					LAND RESOURCE REGION			
					F			
					WATER SOURCE			
					SURFACE			
					TOTAL HARDNESS			
					20 PPM			
					NON-CARBONATE HARDNESS			
					6 PPM			
					FLUORIDATION STATUS			
					FLUORIDATED IN 1969			

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT-1	446	413	392	357	402	381	432	456
1-4	1647	1607	1314	1389	1392	1342	1668	1688
5-9	1700	1685	1386	1463	1670	1631	2022	2109
10-14	1313	1310	1169	1317	1581	1506	1640	1742
15-19	1267	1609	990	1257	1363	1576	1191	1352
20-24	1563	1942	984	1446	1354	1452	828	1039
25-29	2084	2037	1053	1412	1085	1124	795	1039
30-34	1928	1672	1017	1268	1229	1206	791	1062
35-39	1643	1625	1109	1363	1343	1297	904	1132
40-44	1454	1598	917	1099	1371	1304	858	1081
45-49	1194	1329	797	1022	1258	1340	865	1047
50-54	1241	1130	721	812	1150	1360	690	787
55-59	1017	1020	461	526	972	1145	526	729
60-64	763	813	362	426	827	957	412	631
65-69	512	685	339	506	723	930	381	647
70-74	365	567	166	243	433	639	292	413
75-79*	232	460	133	228	226	444	169	225
80-84*	0	0	0	0	130	239	65	115
85-UP	36	83	20	54	46	125	56	94
TOTALS	20405	21585	13330	16188	18555	20098	14585	17388
GRAND TOTAL				71508				70626

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1970				1971				1972				1973			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	887	920	1807	1807	890	913	949	2752	979	1049	970	2998	970	1049	970	2998	970	1049	970	2998	970	1049	970	2998	970	1049	970	2998
CV-RENAL	509	530	1039	1039	472	488	528	1488	518	556	517	1591	517	556	517	1591	517	556	517	1591	517	556	517	1591	517	556	517	1591
HEART	323	354	677	677	305	314	359	978	335	386	354	1075	354	386	354	1075	354	386	354	1075	354	386	354	1075	354	386	354	1075
NON CV-R	378	390	768	768	418	425	421	1264	461	493	461	1407	461	493	461	1407	461	493	461	1407	461	493	461	1407	461	493	461	1407
CANCER	102	92	194	194	118	117	108	343	135	134	134	411	134	134	134	411	134	134	134	411	134	134	411	134	134	134	411	134

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1807.0	1201.0	1.505		2752.0	1250.2	1.280		2998.0	2244.2	1.336	
CV-RENAL	1039.0	589.2	1.763		1488.0	1116.1	1.333		1591.0	1263.2	1.259	
HEART	677.0	402.5	1.682		978.0	589.2	1.650		1075.0	647.1	1.661	
NON CV-R	768.0	611.9	1.255		1264.0	1034.1	1.222		1407.0	981.0	1.434	
CANCER	194.0	176.4	1.100		343.0	314.0	1.092		411.0	326.6	1.258	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

GEORGIA

STATE	165
1950 RANK BY POPULATION	7297
1950 POP/50. MILE	3938
1970 POP/50. MILE	2290
1949 MED. FAM. INCOME	6205
1969 MED. FAM. INCOME	CENTRAL
URBAN CLASS	132
1950 URBAN AREA RANK	48
JAN MEAN TEMPERATURE	81
JULY MEAN TEMPERATURE	43
MEAN ANN. PRECIPITATION	P
LAND RESOURCE REGION	SURFACE
WATER SOURCE	20 PPM
TOTAL HARDNESS	5 PPM
NON-CARBONATE HARDNESS	FLUORIDATED IN 1955
FLUORIDATION STATUS	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	NM	NF	WM	WF	NM	NF	WM	NF
LT 1	686	712	346	342	1288	1244	1257	1189	382	431	1257	1189
1-4	2744	2667	1199	1117	4462	4378	3998	3785	1662	1613	3998	3785
5-9	2537	2476	1036	1118	4618	4552	5844	5209	2345	2406	5844	5209
10-14	1813	1840	1007	975	3853	3885	5844	5209	2345	2406	5844	5209
15-19	1468	2046	918	1022	2600	3466	4388	5093	2285	2361	4388	5093
20-24	2187	2840	892	1255	3502	4470	4388	5093	2285	2361	4388	5093
25-29	2881	2099	1053	1371	3662	3473	4388	5093	2285	2361	4388	5093
30-34	2586	2186	985	1171	3282	3243	2934	3340	1095	1502	2934	3340
35-39	1836	2051	774	967	2202	3274	2826	3359	1013	1436	2826	3359
40-44	1408	1532	632	838	1775	2044	3116	3620	829	1173	3116	3620
45-49	1170	1275	459	594	1399	1701	2914	2972	889	1064	2914	2972
50-54	904	1045	292	409	1029	1312	2263	2506	740	995	2263	2506
55-59	622	845	196	285	790	1154	1671	2184	574	865	1671	2184
60-64	450	735	223	359	570	834	1058	1494	455	740	1058	1494
65-69	327	438	105	162	459	611	688	1198	263	455	688	1198
70-74	252	448	84	151	276	574	402	840	152	261	402	840
75-79	0	0	0	0	157	264	188	500	61	148	188	500
80-84	0	0	0	0	55	178	127	323	75	161	127	323
85-UP	29	66	16	36	48	148	127	323	75	161	127	323
TOTALS	25950	28817	11127	13717	40545	44687	53939	59071	18438	22720	53939	59071
GRAND TOTAL											154168	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1553.0	1087.4	1.428		2304.0	2534.9	1.146		3707.0	3624.1	1.023	
CV-RENAL	737.0	499.2	1.476		1499.0	1201.7	1.247		1919.0	1856.7	1.034	
HEART	452.0	344.1	1.313		964.0	829.0	1.163		1316.0	1275.5	1.032	
NON CV-R	816.0	588.2	1.387		1405.0	1333.1	1.054		1788.0	1765.5	1.013	
CANCER	160.0	158.1	1.012		359.0	369.7	0.971		545.0	542.4	1.005	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	59-61 SUM	1970	1971	1970	1971	69-71 SUM	STATE
TOTAL	770	783	978	963	963	2904	1267	1288	1267	1288	3707	GEORGIA
CV-RENAL	373	364	494	509	496	1499	591	676	591	676	1919	1950 POP./SQ. MILE
HEART	232	220	300	331	333	984	420	461	420	461	1316	1970 POP./SQ. MILE
NON CV-R	397	419	484	467	467	1405	591	636	591	636	1788	1949 MED. FAM. INCOME
CANCER	67	93	112	125	122	359	187	198	187	198	545	1969 MED. FAM. INCOME
												URBAN CLASS
												1950 URBAN AREA RANK
												JAN MEAN TEMPERATURE
												JULY MEAN TEMPERATURE
												MEAN ANN. PRECIPITATION
												LAND RESOURCE REGION
												WATER SOURCE
												TOTAL HARDNESS
												NON-CATEGORICAL HARDNESS
												FLUORIDATION STATUS

NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	182	182	108	116	154	146	100	110	117	123	71	79
1-4	829	814	445	440	619	604	396	420	547	421	320	391
5-9	725	774	379	397	782	748	552	555	685	554	448	455
10-14	681	730	344	375	811	759	474	443	717	624	472	475
15-19	691	877	316	380	852	762	286	305	715	740	416	485
20-24	709	826	260	440	425	553	184	252	532	670	225	298
25-29	715	844	304	372	457	513	183	261	428	410	158	195
30-34	666	709	237	306	497	551	175	272	333	394	163	239
35-39	705	792	243	322	512	606	192	268	380	438	152	223
40-44	601	620	190	252	547	605	194	258	435	530	153	259
45-49	457	489	145	195	516	604	200	232	466	565	177	228
50-54	318	393	149	166	459	530	152	217	458	564	171	228
55-59	265	320	96	105	345	455	127	149	432	535	161	192
60-64	202	293	58	82	247	338	88	117	370	490	127	203
65-69	199	230	87	131	173	291	104	124	256	432	112	151
70-74	91	163	38	62	160	247	57	92	172	298	55	98
75-79*	77	154	45	56	111	155	44	55	106	196	39	78
80-84*	0	0	0	0	37	78	16	25	55	158	21	48
85-UP	15	20	4	22	22	39	10	25	37	88	19	45
TOTALS	8128	9230	3448	4219	7426	8492	3534	4180	7241	8230	3460	4370
GRAND TOTAL				25025			23632					23301

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	212	188	400		232	233	236	701	280	258	283	821
CV-RENAL	103	97	200		125	132	138	395	153	147	149	449
HEART	62	56	118		81	76	72	229	103	89	76	268
NON CV-R	109	91	200		107	101	98	306	127	111	134	372
CANCER	21	21	42		32	37	30	99	29	34	47	110

CITY CHARACTERISTICS

STATE	GEORGIA
1950 RANK BY POPULATION	484
1950 POP/SQ. MILE	1840
1970 POP/SQ. MILE	1664
1949 MED. FAM. INCOME	2593
1969 MED. FAM. INCOME	7498
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	45
JULY MEAN TEMPERATURE	79
MEAN ANN. PRECIPITATION	49
LAND RESOURCE REGION	P
WATER SOURCE	SURFACE
TOTAL HARDNESS	28 PPM
NON-CARBONATE HARDNESS	8 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1956

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	400.0	349.8	1.144	701.0	633.9	1.106	821.0	784.5	1.047
CV-RENAL	200.0	166.0	1.205	395.0	328.8	1.201	449.0	442.0	1.016
HEART	118.0	114.1	1.034	229.0	225.9	1.014	268.0	300.9	0.891
NON CV-R	200.0	183.7	1.089	306.0	305.1	1.003	372.0	342.5	1.086
CANCER	42.0	50.7	0.828	99.0	95.7	1.034	110.0	117.7	0.934

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	378	387	380		380	423	414		604	621	492	478
1-4	1550	1465	1346		1239	1222	1628	1675	2404	2176	1832	1911
5-9	1441	1493	1290		1560	1593	1893	1966	3363	3224	2737	2796
10-14	1201	1237	1179	1236	1724	1696	1649	1668	3664	3547	2842	2902
15-19	1163	1842	1096	1262	1365	1865	1886	1777	3347	3787	2405	2534
20-24	1746	2102	970	1362	1395	1467	925	1051	2651	3415	1888	2048
25-29	1798	1953	1085	1398	1074	1023	826	1074	2524	2604	1151	1464
30-34	1619	1748	997	1353	1071	1139	828	1085	2166	2164	942	1293
35-39	1498	1624	1111	1424	1232	1452	907	1079	2065	2195	970	1366
40-44	1379	1634	954	1446	1253	1534	939	1185	2428	2614	955	1343
45-49	1199	1390	804	983	1259	1372	811	1028	2530	2840	963	1202
50-54	1017	1231	658	806	1207	1409	709	849	2275	2569	921	1268
55-59	925	1079	450	542	950	1187	545	778	1837	2171	923	1308
60-64	656	829	309	470	723	1057	401	577	1056	1612	547	910
65-69	567	548	349	225	596	753	333	385	1626	1295	378	610
70-74	374	368	236	155	387	515	145	240	468	902	206	385
75-79	274	442	168	200	210	243	56	116	210	556	101	241
80-84	0	0	0	44	127	113	24	80	149	408	104	223
85-TP	35	91	28		51							
TOTALS	18815	21889	13451	16697	17994	20906	14063	16851	35853	40752	20630	25188
GRAND TOTAL				70252				69764				122423

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	288	265	84	85	249	253	113	101	195	185	87	64
1-4	1114	995	288	304	1001	998	407	364	659	658	299	301
5-9	986	1018	241	289	1174	1153	407	468	978	899	412	418
10-14	809	792	224	245	1240	1186	390	398	1053	1033	430	408
15-19	780	1035	196	260	892	1026	222	289	959	1135	339	398
20-24	851	1178	239	302	894	831	194	253	858	979	236	258
25-29	1008	1163	233	295	729	694	176	239	669	644	174	228
30-34	921	1014	195	261	784	847	211	236	589	610	144	207
35-39	855	1077	243	300	821	985	186	244	582	686	141	216
40-44	866	906	176	209	795	949	169	251	642	755	173	206
45-49	596	720	168	198	784	886	192	250	752	876	152	219
50-54	507	538	132	144	708	823	165	209	675	789	172	194
55-59	430	506	94	119	524	670	146	177	610	795	169	207
60-64	333	468	63	80	390	523	90	117	561	752	128	181
65-69	272	391	76	115	312	490	82	126	405	675	116	156
70-74	174	248	39	51	256	420	53	92	299	480	58	92
75-79#	142	248	40	41	180	304	48	62	184	336	34	71
80-84#	0	0	0	0	58	136	17	36	89	240	35	50
85-UP	18	29	7	8	46	84	10	20	59	154	19	38
TOTALS	10980	12591	2738	3306	11647	13369	3278	3932	10818	12681	3318	3942
GRAND TOTAL				29615				32226				30759

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	556.0	1030.0	1256.0		445.1	912.2	1085.7		445.1	912.2	1085.7	
	1.249	1.129	1.157		1.249	1.129	1.157		1.249	1.129	1.157	
CV-RENAL	253.0	546.0	671.0		219.9	489.1	623.7		219.9	489.1	623.7	
	1.151	1.116	1.076		1.151	1.116	1.076		1.151	1.116	1.076	
HEART	149.0	354.0	406.0		153.9	338.7	428.5		153.9	338.7	428.5	
	0.968	1.045	0.948		0.968	1.045	0.948		0.968	1.045	0.948	
NON CV-R	303.0	484.0	585.0		225.2	423.1	462.1		225.2	423.1	462.1	
	1.345	1.144	1.266		1.345	1.144	1.266		1.345	1.144	1.266	
CANCER	88.0	148.0	184.0		69.5	139.2	164.8		69.5	139.2	164.8	
	1.285	1.063	1.116		1.285	1.063	1.116		1.285	1.063	1.116	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS	CODE
GEORGIA	405	3846	2278	2571	7996	INDEPENDENT	-	42	80	52	3	SURFACE	33	12	FLUORIDATED IN 1952	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF
LT 1	858	743	593	556	1281	1305	754	762	538	482	584	543
1-4	3321	3258	2299	2246	4843	4561	2758	2920	1833	1734	2223	2258
5-9	3231	3073	2248	2420	4974	4911	3084	3186	2581	2424	3236	3236
10-14	2337	2355	1881	1998	4314	4297	2758	2860	2798	2760	3141	3305
15-19	1896	2483	1555	1939	3264	3498	2617	2213	2651	2799	2665	2924
20-24	2485	3310	1537	2247	3784	3612	1485	1889	4248	2949	2153	2314
25-29	3182	3708	1963	2358	3594	3433	1376	1737	2317	1982	1248	1509
30-34	3294	3254	1735	2222	3394	3555	1365	1793	1577	1554	1101	1402
35-39	2897	2974	1918	2431	3540	3698	1446	1934	1326	1428	1088	1493
40-44	2431	2518	1628	1947	3186	3214	1453	1869	1641	1520	1110	1588
45-49	1960	2189	1474	1705	2732	2823	1447	1760	1842	2251	1177	1630
50-54	1679	1860	1217	1713	2162	2230	1255	1551	1930	2245	1197	1526
55-59	1369	1665	864	809	1724	2117	1091	1239	1762	2094	1694	1340
60-64	1084	1324	519	662	1532	1743	760	835	1431	1833	974	1083
65-69	766	1006	352	466	1279	1611	531	585	1031	1343	687	737
70-74	522	807	233	353	729	1170	441	552	887	1303	439	479
75-79	411	716	186	260	428	732	231	345	470	1005	310	429
80-84	0	0	0	0	169	408	62	146	244	554	138	250
85-89	57	115	28	59	114	249	63	98	145	370	99	199
TOTALS	33830	37458	22300	26050	46630	49357	24517	26741	31142	33508	24661	29038
GRAND TOTAL				119638			149245					118349

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	2725.0	1874.9	1.453		4434.0	3798.5	1.167		4829.0	3934.6	1.227	
CV-RENAL												
	1432.0	894.9	1.595		2472.0	1876.0	1.315		2537.0	2156.0	1.175	
HEART												
	918.0	613.2	1.497		1480.0	1052.8	1.156		1691.0	1164.0	1.164	
NON CV-R												
	1293.0	977.0	1.323		1962.0	1775.6	1.022		2292.0	1756.0	1.291	
CANCER												
	277.0	274.8	1.008		537.0	573.0	0.976		735.0	733.0	1.283	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF
TOTAL	1339	1386	2725	2246	1462	1461	1443	1443	1558	1549	1558	1489
CV-RENAL	698	734	1432	1432	823	843	806	806	817	809	817	829
HEART	433	485	918	918	527	505	448	448	547	547	547	547
NON CV-R	641	652	1293	1293	639	688	635	635	741	740	741	741
CANCER	149	128	277	277	167	186	184	184	249	238	249	238

CITY CHARACTERISTICS

STATE	GEORGIA	
	1950 RANK BY POPULATION	87
1950 POP./SQ. MILE	8194	
1970 POP./SQ. MILE	4416	
1949 MED. FAM. INCOME	2373	
1969 MED. FAM. INCOME	7143	
URBAN CLASS	CENTRAL	
1950 URBAN AREA RANK	97	
JAN MEAN TEMPERATURE	52	
JULY MEAN TEMPERATURE	81	
MEAN ANN. PRECIPITATION	45	
LAND RESOURCE REGION	T	
WATER SOURCE	GROUND AND SURFACE	
TOTAL HARDNESS	36 PPM	
NON-CARBONATE HARDNESS	8 PPM	
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	WM	WF	NP	WM	WF	NP	WM	WF	NP	WM	WF	NP	WM	WF	NP	WM	WF	NP
LT 1	385	387	3	374	354	7	739	654	11	739	654	14	11	739	654	14	11	739
1-4	1430	1449	8	1282	1335	15	2535	2366	44	2535	2366	53	44	2535	2366	53	44	2535
5-9	1349	1381	8	1602	1461	21	3468	3436	30	3468	3436	59	30	3468	3436	59	30	3468
10-14	969	1103	17	1533	1481	15	3715	3630	44	3715	3630	44	44	3715	3630	44	44	3715
15-19	779	1194	8	1232	1547	11	2981	3817	51	2981	3817	51	51	2981	3817	51	38	2981
20-24	1022	1453	8	1120	1251	23	3484	3496	66	3484	3496	66	66	3484	3496	66	66	3484
25-29	1326	1500	17	808	862	13	2582	2652	33	2582	2652	34	33	2582	2652	34	33	2582
30-34	1402	1481	15	790	858	13	2005	2086	24	2005	2086	24	24	2005	2086	24	24	2005
35-39	1326	1451	15	945	1058	11	1829	2323	13	1829	2323	13	13	1829	2323	13	13	1829
40-44	1200	1229	9	1014	1183	13	2055	2354	23	2055	2354	23	23	2055	2354	23	23	2055
45-49	992	1003	12	1012	1163	16	1891	2168	19	1891	2168	19	19	1891	2168	19	19	1891
50-54	849	974	13	934	924	13	1709	1984	12	1709	1984	12	12	1709	1984	12	12	1709
55-59	813	856	5	788	863	4	1475	1652	14	1475	1652	14	14	1475	1652	14	14	1475
60-64	697	791	5	642	869	8	1050	1259	5	1050	1259	5	5	1050	1259	5	5	1050
65-69	606	724	6	584	754	3	778	1168	6	778	1168	6	6	778	1168	6	6	778
70-74	431	499	7	395	580	4	570	893	4	570	893	4	4	570	893	4	4	570
75-79*	394	500	2	218	326	3	347	687	1	347	687	1	1	347	687	1	1	347
80-84*	0	0	0	112	186	1	238	488	1	238	488	1	1	238	488	1	1	238
85-UP	68	90	1				35408	38722	421	35408	38722	439	421	35408	38722	439	421	35408
TOTALS	16038	18065	162	16123	17990	193	175			175		439	421	175		439	421	175
GRAND TOTAL			34393			34481						74990				74990		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*
TOTAL	783.0	660.7	1929.0	1289.5	2401.0	2376.2
		OBS/EXP		1.496		1.010
CV-RENAL	409.0	368.2	1064.0	764.6	1249.0	1397.5
		OBS/EXP		1.392		0.894
HEART	312.0	263.3	730.0	537.5	850.0	976.1
		OBS/EXP		1.358		0.871
NON CV-R	374.0	292.5	865.0	524.9	1152.0	980.7
		OBS/EXP		1.279		1.175
CANCER	102.0	106.8	271.0	199.5	404.0	358.7
		OBS/EXP		0.955		1.126

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	
	STATE	1960
1950 RANK BY POPULATION	32	69-71
1950 POP./SQ. MILE	3058	SUM
1950 PER/50. FEM.	3205	1971
1949 MED. FEM. INCOME	3692	1970
1949 MED. FEM. INCOME	9858	1969
URBAN CLASS	INDEPENDENT	1960
1950 URBAN AREA RANK	27	59-61
JAN MEAN TEMPERATURE	74	SUM
JULY MEAN TEMPERATURE	71	1971
MEAN ANN. PRECIPITATION	B	1970
LAND RESOURCE REGION	B	1969
WATER SOURCE	GROUND	1960
TOTAL HARDNESS	85 PPM	59-61
NON-CARBONATE HARDNESS	11 PPM	SUM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	1971

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	396	365	7	7	389	392	10	6	453	402	21	9
1-4	1364	1296	18	31	1439	1386	30	50	1583	1398	37	45
5-9	1208	1172	10	16	1609	1471	43	47	1914	1817	53	59
10-14	956	926	16	15	1350	1308	26	28	1968	1960	63	51
15-19	895	1038	16	22	1246	1241	25	26	2249	2149	79	73
20-24	1323	1311	25	22	1294	1167	40	26	2246	2351	92	57
25-29	1150	1119	41	21	977	877	28	23	1506	1308	50	44
30-34	1081	995	18	24	843	806	25	26	1025	1041	26	20
35-39	898	840	30	22	805	811	29	30	939	970	19	20
40-44	834	765	17	20	800	805	17	20	904	937	26	26
45-49	653	632	25	17	697	721	24	20	897	946	30	31
50-54	581	542	20	17	650	668	16	11	738	813	26	21
55-59	545	478	21	9	559	547	16	13	630	813	26	26
60-64	490	402	15	8	446	478	17	13	680	758	45	18
65-69	309	273	9	6	392	403	11	12	465	559	11	12
70-74	189	198	11	2	323	303	11	7	352	477	9	14
75-79	143	162	10	2	171	196	4	2	250	333	7	9
80-84	0	0	0	0	75	88	1	1	149	222	8	3
85-UP	13	32	0	1	34	67	2	0	95	137	8	4
TOTALS	13019	12546	310	256	14107	13694	375	358	19373	19501	616	546
GRAND TOTAL				26131				28534				40036

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	432.0	432.0	1.251		809.0	809.0	1.209		967.0	967.0	1.026	
CV-RENAL	181.0	181.0	1.086		398.0	398.0	1.142		567.5	567.5	0.867	
HEART	128.0	128.0	1.051		282.0	282.0	1.125		400.0	400.0	0.833	
NON CV-R	251.0	251.0	1.405		411.0	411.0	1.282		475.0	475.0	1.034	
CANCER	56.0	56.0	1.015		106.0	106.0	1.004		151.0	151.0	0.968	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1959	1960	1961	SUM	1971	1970	SUM	
TOTAL	198	234	432		266	292	251	809	341	287	627	
CV-RENAL	88	93	181		145	132	121	398	168	150	318	
HEART	60	68	128		102	94	86	282	104	102	206	
NON CV-R	110	141	251		121	160	130	411	173	137	310	
CANCER	25	31	56		34	36	36	106	54	48	102	

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLOODATION STATUS	GROUND AND SURFACE
IDAHO	464	5939	2922	3937	8905	INDEPENDENT	-	22	12	12	B	GROUND	139 PPM	7 PPM	NO ARTIFICIAL	LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	286	261	43	56	409	436	70	85	263	245	97	86
1-4	1053	1000	208	182	1643	1574	321	301	989	952	350	292
5-9	1019	1028	196	186	1804	1723	335	347	1529	1397	420	402
10-14	963	941	159	168	1622	1576	249	252	1586	1540	454	432
15-19	835	1038	138	145	1172	1423	176	215	1306	1454	345	369
20-24	1039	1237	130	163	1061	1268	105	160	1033	1252	192	263
25-29	1149	1255	116	149	1139	1177	103	148	910	983	163	208
30-34	945	1059	117	147	1105	1205	123	167	731	801	112	168
35-39	976	1152	114	158	1167	1346	99	140	730	832	122	150
40-44	1134	1101	139	139	1128	1276	113	157	837	1024	125	187
45-49	966	976	146	120	1140	1302	114	141	931	1115	114	160
50-54	802	861	128	110	1219	1282	133	133	947	1071	123	160
55-59	728	787	107	83	1046	1126	136	115	907	1143	111	150
60-64	587	650	57	47	800	939	100	92	994	1120	92	133
65-69	485	617	38	45	630	809	83	87	702	940	106	103
70-74	339	414	23	31	449	591	48	46	458	733	80	93
75-79#	353	502	27	32	284	471	22	30	302	576	43	47
80-84*	0	0	0	0	159	253	8	16	144	331	21	18
85-UP	64	97	3	1	88	217	8	10	94	259	18	30
TOTALS	13703	14996	1889	1962	18065	19994	2346	2642	15393	17768	3088	3451
GRAND TOTAL				32550				43047				39700

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	737.0	1273.0	1463.0		737.0	1273.0	1463.0		737.0	1273.0	1463.0	
CV-RENAL												
OBSERVED	404.0	703.0	841.0		404.0	703.0	841.0		404.0	703.0	841.0	
EXPECTED*	364.1	766.3	867.8		364.1	766.3	867.8		364.1	766.3	867.8	
OBS/EXP	1.110	0.917	0.969		1.110	0.917	0.969		1.110	0.917	0.969	
HEART												
OBSERVED	293.0	487.0	622.0		293.0	487.0	622.0		293.0	487.0	622.0	
EXPECTED*	256.5	537.4	602.4		256.5	537.4	602.4		256.5	537.4	602.4	
OBS/EXP	1.142	0.906	1.032		1.142	0.906	1.032		1.142	0.906	1.032	
NON CV-R												
OBSERVED	333.0	570.0	622.0		333.0	570.0	622.0		333.0	570.0	622.0	
EXPECTED*	290.5	599.9	614.4		290.5	599.9	614.4		290.5	599.9	614.4	
OBS/EXP	1.146	0.950	1.012		1.146	0.950	1.012		1.146	0.950	1.012	
CANCER												
OBSERVED	110.0	227.0	235.0		110.0	227.0	235.0		110.0	227.0	235.0	
EXPECTED*	102.8	211.3	227.0		102.8	211.3	227.0		102.8	211.3	227.0	
OBS/EXP	1.071	1.074	1.035		1.071	1.074	1.035		1.071	1.074	1.035	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE
STATE		ILLINOIS
1950 RANK BY POPULATION		372
1950 POP/SQ. MILE		5086
1970 POP/SQ. MILE		3609
1949 MED. FAM. INCOME		3460
1969 MED. FAM. INCOME		9600
URBAN CLASS		INDEPENDENT
1950 URBAN AREA RANK		-
JAN MEAN TEMPERATURE		33
JULY MEAN TEMPERATURE		80
MEAN ANN. PRECIPITATION		37
LAND RESOURCE REGION		M
WATER SOURCE		SURFACE
TOTAL HARDNESS		106 PPM
NON-CARBONATE HARDNESS		54 PPM
FLUORIDATION STATUS		FLUORIDATED IN 1968

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	1194.0	2152.0	2225.0
EXPECTED*	1045.1	1886.4	2202.7
OBS/EXP	1.142	1.141	1.010
CV-RENAL			
OBSERVED	677.0	1210.0	1222.0
EXPECTED*	592.8	1047.5	1257.5
OBS/EXP	1.142	1.155	0.972
HEART			
OBSERVED	462.0	898.0	848.0
EXPECTED*	423.2	795.5	879.6
OBS/EXP	1.092	1.205	0.964
NON CV-R			
OBSERVED	517.0	942.0	1003.0
EXPECTED*	452.3	838.9	945.1
OBS/EXP	1.143	1.123	1.061
CANCER			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE
STATE	ILLINOIS	
1950 RANK BY POPULATION	230	
1950 POP./SQ. MILE	6244	
1970 POP./SQ. MILE	5761	
1949 MED. FAM. INCOME	3991	
1969 MED. FAM. INCOME	11274	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	23	
JULY MEAN TEMPERATURE	73	
MEAN ANNUAL PRECIPITATION	34	
LAND RESOURCE REGION	L	
WATER SOURCE	GROUND	
TOTAL HARDNESS	350 PPM	
NON-CARBONATE HARDNESS	93 PPM	
FLUORIDATION STATUS	NO ARTIFICIAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
TOTAL	305	324	4	2	400	375	3	3	262	289	5	2
10-14	1299	1200	12	9	1506	1484	8	7	1084	1099	18	12
15-19	5-9	1070	1035	13	1776	1748	12	15	1813	1829	10	14
20-24	824	824	3	9	1585	1491	8	12	1971	1933	21	21
25-29	869	950	7	9	1119	1118	12	8	1741	1906	29	18
30-34	1406	1351	13	14	913	1011	10	11	1362	1602	21	20
35-39	1420	1464	15	9	1007	1027	14	11	1153	1147	14	11
40-44	1290	1261	9	6	1125	1206	9	12	865	961	4	13
45-49	1209	1266	9	7	1211	1360	10	8	995	1084	12	12
50-54	1173	1245	4	3	1170	1249	5	7	1179	1250	8	14
55-59	1024	1131	3	6	1087	1201	10	6	1214	1378	11	10
60-64	925	1031	4	7	1053	1197	2	6	1179	1308	8	7
65-69	808	929	2	2	950	1187	2	1	1103	1339	8	4
70-74	724	845	2	1	819	1009	5	4	1020	1298	3	5
75-79	608	747	2	2	657	947	4	3	771	1185	2	4
80-84	480	538	2	5	522	783	1	1	571	981	3	5
85-UP	363	626	2	1	371	566	2	2	405	791	3	2
TOTALS	15642	16872	107	100	17557	19471	118	118	19088	22254	181	176
GRAND TOTAL				32721				37264				41699

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	811.0	1402.0	1778.0	811.0	1402.0	1778.0	811.0	1402.0	1778.0
CV-RENAL	687.4	1298.1	1669.3	687.4	1298.1	1669.3	687.4	1298.1	1669.3
HEART	1.180	1.080	1.065	1.180	1.080	1.065	1.180	1.080	1.065
NON CV-R	437.0	848.0	1068.0	437.0	848.0	1068.0	437.0	848.0	1068.0
CANCER	390.6	758.0	1023.7	390.6	758.0	1023.7	390.6	758.0	1023.7
GRAND TOTAL	1.119	1.119	1.043	1.119	1.119	1.043	1.119	1.119	1.043
HEART	322.0	605.0	780.0	322.0	605.0	780.0	322.0	605.0	780.0
NON CV-R	278.5	536.0	713.4	278.5	536.0	713.4	278.5	536.0	713.4
CANCER	1.156	1.129	1.093	1.156	1.129	1.093	1.156	1.129	1.093
GRAND TOTAL	374.0	554.0	710.0	374.0	554.0	710.0	374.0	554.0	710.0
CANCER	296.8	540.1	645.6	296.8	540.1	645.6	296.8	540.1	645.6
GRAND TOTAL	1.260	1.026	1.100	1.260	1.026	1.100	1.260	1.026	1.100
CANCER	117.0	257.0	323.0	117.0	257.0	323.0	117.0	257.0	323.0
GRAND TOTAL	111.4	206.8	256.8	111.4	206.8	256.8	111.4	206.8	256.8
CANCER	1.050	1.243	1.258	1.050	1.243	1.258	1.050	1.243	1.258
GRAND TOTAL									

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1959				1960				1961				1969				1970				1971				1976			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
TOTAL	401	410	811	410	461	461	476	1402	461	461	476	1402	608	608	628	542	628	628	628	542	628	628	542	628	628	628	542	628
CV-RENAL	210	227	437	227	278	278	285	898	278	278	285	898	362	362	386	320	362	362	362	320	362	362	320	362	362	362	320	362
HEART	156	166	322	166	207	207	200	605	207	207	200	605	258	258	277	245	258	258	258	245	258	258	245	258	258	245	258	245
NON CV-R	191	183	374	183	183	183	191	554	183	183	191	554	246	246	242	222	246	246	242	222	246	246	222	246	246	222	246	222
CANCER	59	58	117	58	85	85	93	257	85	85	93	257	108	108	107	108	108	107	107	108	108	108	108	107	108	108	107	108

CITY CHARACTERISTICS

STATE	ILLINOIS		CODE
	1950 RANK BY POPULATION	1970 RANK BY POPULATION	
1950 POP/SQ. MILE	371	371	5113
1970 POP/SQ. MILE	4344	4344	4344
1949 MED. FAM. INCOME	3290	3290	3290
1969 MED. FAM. INCOME	10537	10537	10537
URBAN CLASS	FRINGE	FRINGE	9
1950 URBAN AREA RANK	32	32	32
JAN MEAN TEMPERATURE	79	79	79
JULY MEAN TEMPERATURE	38	38	38
MEAN ANN. PRECIPITATION	M	M	M
LAND RESOURCE REGION			
WATER SOURCE			
TOTAL HADWESS			
NON-CARBONATE HARDNESS			
FLUORIDATION STATUS			

FLUORIDATED IN 1968

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				NP
	WM	WP	MM	MP	
IT 1	426	382	1	1	2
1-4	1654	1542	1	1	2
5-9	1725	1612	0	0	0
10-14	1364	1263	3	3	0
15-19	1390	1361	0	1	1
20-24	1558	1800	3	1	1
25-29	1845	1889	0	3	3
30-34	1845	2120	0	1	1
35-39	2000	2402	2	0	0
40-44	2125	2267	1	0	0
45-49	2024	2170	1	0	0
50-54	2012	2063	0	0	0
55-59	1818	1788	0	0	0
60-64	1353	1388	0	1	1
65-69	862	964	0	1	1
70-74	488	571	0	1	1
75-79	417	538	0	0	0
80-84	0	0	0	0	0
85-UP	48	72	0	0	0
TOTALS	25064	26191	12	13	13
GRAND TOTAL					51280

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	982.0	1798.0	2177.0
EXPECTED*	892.0	1858.8	2345.8
OBS/EXP	1.101	0.967	0.928
CV-RENAL			
OBSERVED	576.0	1090.0	1320.0
EXPECTED*	479.7	1055.2	1427.8
OBS/EXP	1.201	1.033	0.924
HEART			
OBSERVED	430.0	846.0	1038.0
EXPECTED*	353.5	767.4	1011.2
OBS/EXP	1.216	1.102	1.027
NON CV-R			
OBSERVED	406.0	708.0	857.0
EXPECTED*	412.3	803.6	916.0
OBS/EXP	0.985	0.881	0.934
CANCER			
OBSERVED	181.0	352.0	429.0
EXPECTED*	160.2	325.4	385.3
OBS/EXP	1.130	1.082	1.113

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50	1959	1960	1961	59-61	1969	1970	1971	69-71
			SUM				SUM				SUM
TOTAL	483	499	982	589	613	596	1798	729	721	727	2177
CV-RENAL	256	341	596	361	388	320	1090	436	443	441	1320
HEART	184	246	430	281	299	266	846	338	352	348	1038
NON CV-R	227	179	406	228	225	278	731	278	285	286	857
CANCER	107	74	181	106	122	124	352	140	144	145	429

CITY CHARACTERISTICS

ILLINOIS	
STATE	225
1950 BANK BY POPULATION	
1950 POP./SQ. MILE	13495
1970 POP./SQ. MILE	13462
1949 MED. P.M. INCOME	4706
1969 MED. P.M. INCOME	11836
URBAN CLASS	PRINCE
1950 URBAN AREA RANK	2
JAN MEAN TEMPERATURE	24
JULY MEAN TEMPERATURE	74
MEAN ANNUAL PRECIPITATION	32
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	133 PPM
NON-CARBONATE HARDNESS	23 PPM
FLOODING STATUS	FLOODED IN 1956

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF
IT 1	316	267	5	8	383	388	16	26	315	317	26	16	315	317	26	16	315	317
1-4	1232	1150	35	32	1483	1444	57	70	1234	1150	87	68	1234	1150	87	68	1234	1150
5-9	1141	1086	30	25	1557	1568	54	68	1697	1592	111	84	1697	1592	111	84	1697	1592
10-14	951	979	42	22	1383	1324	46	48	1633	1642	106	116	1633	1642	106	116	1633	1642
15-19	1004	1312	36	52	1206	1467	25	60	1622	2059	100	118	1622	2059	100	118	1622	2059
20-24	1362	1610	41	51	1089	1380	44	47	2075	2393	64	78	2075	2393	64	78	2075	2393
25-29	1260	1315	32	32	981	1016	35	26	1351	1347	47	56	1351	1347	47	56	1351	1347
30-34	1082	1215	28	15	1075	1068	30	39	988	1007	45	50	988	1007	45	50	988	1007
35-39	1056	1186	25	35	1000	1094	31	34	860	864	47	36	860	864	47	36	860	864
40-44	993	1155	27	32	902	1073	31	27	907	989	35	45	907	989	35	45	907	989
45-49	932	1080	34	21	924	1071	16	34	931	1058	26	36	931	1058	26	36	931	1058
50-54	910	1045	23	19	865	1089	31	37	834	1005	28	36	834	1005	28	36	834	1005
55-59	834	1098	10	18	786	1067	22	19	922	1032	25	27	922	1032	25	27	922	1032
60-64	825	931	16	20	653	1032	15	20	595	873	27	16	595	873	27	16	595	873
65-69	543	607	20	11	546	798	7	11	430	803	12	21	430	803	12	21	430	803
70-74	523	649	13	7	376	508	9	10	318	738	8	9	318	738	8	9	318	738
75-79	476	695	8	0	212	356	1	3	214	389	3	6	214	389	3	6	214	389
80-84	79	127	0	2	100	207	2	1	131	291	1	5	131	291	1	5	131	291
85-UP	15621	17707	425	410	16313	18871	491	596	17717	20591	821	863	17717	20591	821	863	17717	20591
TOTALS	15621	17707	425	410	16313	18871	491	596	17717	20591	821	863	17717	20591	821	863	17717	20591
GRAND TOTAL	15621	17707	425	410	16313	18871	491	596	17717	20591	821	863	17717	20591	821	863	17717	20591

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	948.0	774.5	1.224		1361.0	1133.7	1.020		1452.0	1407.7	1.031	
CV-RENAL	545.0	450.4	1.210		839.0	765.3	1.068		887.0	844.6	1.050	
HEART	383.0	319.0	1.201		575.0	550.5	1.044		603.0	584.9	1.031	
NON CV-R	403.0	324.1	1.243		522.0	548.4	0.952		565.0	563.2	1.003	
CANCER	152.0	124.7	1.219		229.0	210.1	1.110		259.0	210.1	1.233	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	ILLINOIS		BLOOMINGTON	
	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 RANK BY POPULATION	1970 POP./SQ. MILE
1950 RANK BY POPULATION	356	6326	1970 RANK BY POPULATION	360
1950 POP./SQ. MILE	6326	3392	1970 POP./SQ. MILE	3392
1949 MED. FAM. INCOME	10392	INDEPENDENT	1969 MED. FAM. INCOME	10392
1969 MED. FAM. INCOME	10392	INDEPENDENT	1969 MED. FAM. INCOME	10392
URBAN CLASS AREA RANK	1350	26	URBAN CLASS AREA RANK	1350
1950 MEAN TEMPERATURE	56	36	1950 MEAN TEMPERATURE	56
1970 MEAN TEMPERATURE	56	36	1970 MEAN TEMPERATURE	56
MEAN ANNUAL PRECIPITATION	36	36	MEAN ANNUAL PRECIPITATION	36
LAND RESOURCE REGION	M	36	LAND RESOURCE REGION	M
WATER SOURCE	98 PPM	36 PPM	WATER SOURCE	98 PPM
TOTAL HARDNESS	36 PPM	36 PPM	TOTAL HARDNESS	36 PPM
NON-CARBONATE HARDNESS	36 PPM	36 PPM	NON-CARBONATE HARDNESS	36 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	WM	NF	WM	WF	NM	NF	WM	NF
LT-1	27902	26466	5863	6161	27881	26677	13763	14024	13763	14024	13763	14024
1-4	111608	107030	21082	21064	99370	96435	51212	51310	51212	51310	51212	51310
5-9	10182	106881	19383	19704	106741	103505	51139	51504	51139	51504	51139	51504
10-14	87233	84945	16212	16933	100533	97861	36899	36790	36899	36790	36899	36790
15-19	84284	87525	14186	16419	82450	89498	23494	27098	82450	89498	23494	27098
20-24	110309	119958	20025	25808	78517	89346	24156	33034	78517	89346	24156	33034
25-29	130703	135734	25349	29956	84686	79779	28995	34986	84686	79779	28995	34986
30-34	127111	135959	22258	25706	88073	83026	31001	35856	88073	83026	31001	35856
35-39	124060	133750	21823	24255	90965	93352	30246	33312	90965	93352	30246	33312
40-44	113700	120624	19098	20078	92322	100463	27477	26911	92322	100463	27477	26911
45-49	106500	109018	17898	17470	94903	103139	27136	22599	94903	103139	27136	22599
50-54	103508	104637	14399	13137	87512	94397	18451	18901	87512	94397	18451	18901
55-59	96896	95416	9913	9205	82341	86484	16953	16473	82341	86484	16953	16473
60-64	81669	76655	6990	6560	70715	76730	11598	11700	70715	76730	11598	11700
65-69	55919	57382	5284	5944	59311	68071	8180	9221	59311	68071	8180	9221
70-74	32287	36481	2669	3184	42311	49724	5203	5938	42311	49724	5203	5938
75-79*	25386	36217	1925	2636	22966	28841	2930	3549	22966	28841	2930	3549
80-84*	0	0	0	0	9510	13976	1122	1640	9510	13976	1122	1640
85-UP	3592	5958	306	554	4282	7855	772	1173	4282	7855	772	1173
TOTALS	15328491578676	244663	264774	3620962	13253891387359	401597	436059	3550404	13253891387359	401597	436059	3550404
GRAND TOTAL												

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	82338.0	126688.0	123080.0		63658.1	108696.3	112976.2		82338.0	126688.0	123080.0	
CV-RENAL												
OBSERVED	45277.0	73222.0	69465.0									
EXPECTED*	33493.8	57677.1	62907.1									
OBS/EXP	1.352	1.270	1.104									
HEART												
OBSERVED	35234.0	57233.0	55179.0									
EXPECTED*	24086.8	40866.0	43442.4									
OBS/EXP	1.463	1.400	1.270									
NON CV-R												
OBSERVED	37061.0	53466.0	53615.0									
EXPECTED*	30164.2	51008.6	50069.1									
OBS/EXP	1.229	1.048	1.071									
CANCER												
OBSERVED	13460.0	20987.0	20480.0									
EXPECTED*	10598.6	17299.0	17078.1									
OBS/EXP	1.271	1.213	1.199									

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	ILLINOIS
1950 RANK BY POPULATION	2
1950 POP/50. MILE	17450
1970 POP/50. MILE	15126
1949 MED. FAM. INCOME	3956
1969 MED. FAM. INCOME	10242
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	2
JAN MEAN TEMPERATURE	74
JULY MEAN TEMPERATURE	74
MEAN ANN. PRECIPITATION	32
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	133 PPM
NON-CARBONATE HARDNESS	133 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1956

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	NF
LT 1	606	576	0	2	701	655	0	0	541	462	4	2	2005	1822	11	19		
1-4	2382	2379	2	0	2424	2287	0	0	2341	2205	8	12	2341	2205	8	12		
5-9	1800	1847	6	0	2465	2442	0	1	2541	2386	5	7	2308	2435	5	6		
10-14	2408	2347	6	1	2520	2541	2	4	2308	2435	5	6	2360	3072	4	10		
15-19	1656	1664	2	2	2199	2387	2	1	2360	3072	4	10	2360	3072	4	10		
20-24	2088	2488	2	2	2195	2367	1	4	2360	3072	4	10	2360	3072	4	10		
25-29	2830	2929	3	3	2161	1934	2	3	2582	2306	16	21	1789	1674	11	5		
30-34	3033	3199	3	2	2123	2090	1	1	1625	1579	5	12	1625	1579	5	12		
35-39	3073	3204	4	1	2305	2479	3	3	1625	1579	5	12	1625	1579	5	12		
40-44	2735	2692	2	1	2657	2830	1	1	1877	1925	7	9	1877	1925	7	9		
45-49	2226	2236	1	2	2760	2971	0	0	2082	2355	4	4	2082	2355	4	4		
50-54	2187	2177	3	1	2365	2407	0	0	2391	2784	5	6	2391	2784	5	6		
55-59	2138	2063	3	1	2109	2069	1	0	2432	2671	7	6	2432	2671	7	6		
60-64	1814	1670	1	1	1748	1823	3	2	1965	2136	4	2	1965	2136	4	2		
65-69	1258	1212	2	0	1443	1619	0	0	1355	1603	2	0	1355	1603	2	0		
70-74	722	690	1	0	1057	1186	0	0	760	1842	0	0	760	1842	0	0		
75-79	493	543	1	2	579	1177	0	0	372	531	0	2	372	531	0	2		
80-84	0	0	0	0	234	322	0	0	173	254	0	0	173	254	0	0		
85-89	50	74	0	0	91	131	0	0	173	254	0	0	173	254	0	0		
TOTALS	33499	33990	36	19	33846	35247	16	21	32352	34479	100	127	32352	34479	100	127		
GRAND TOTAL																	67058	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1227.0	1100.0	1.115	2160.0	2069.0	1.044	2497.0	2377.8	1.050
CV-RENAL	670.0	580.4	1.154	1301.0	1144.8	1.136	1492.0	1368.9	1.074
HEART	534.0	430.1	1.242	1002.0	835.9	1.199	1181.0	994.4	1.188
NON CV-R	557.0	519.6	1.072	859.0	924.2	0.929	1005.0	988.9	1.016
CANCER	228.0	196.4	1.161	400.0	359.0	1.114	450.0	396.9	1.134

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	CODE	
TOTAL	611	616	675	733	752	2160	837	788	872	2497	ILLINOIS	
CV-RENAL	326	344	414	435	452	1301	506	471	515	1492	STATE	
HEART	257	277	322	335	345	1002	397	370	414	1181	1950 RANK BY POPULATION	
NON CV-R	285	272	261	298	300	859	331	317	357	1005	1950 POP/50. MILE	
CANCER	127	101	117	136	147	400	140	136	174	450	1970 POP/50. MILE	
											1949 MED. FAM. INCOME	
											1969 MED. FAM. INCOME	
											URBAN CLASS	
											1950 URBAN AREA RANK	
											JAN MEAN TEMPERATURE	
											JULY MEAN TEMPERATURE	
											MEAN ANN. PRECIPITATION	
											LAND RESOURCE REGION	
											WATER SOURCE	
											TOTAL HARDNESS	
											NON-CARBONATE HARDNESS	
											FLUORIDATION STATUS	
											SURFACE	
											133 PPM	
											FLUORIDATED IN 1956	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	305	324	40	31	406	353	92	77	274	277	46	64
1-4	1290	1291	108	135	1579	1408	307	295	1062	1077	257	244
5-9	1269	1265	125	140	1569	1406	357	319	1627	1487	306	342
10-14	1089	1084	127	140	1269	1246	255	259	1722	1657	373	420
15-19	964	1113	177	120	1015	1054	141	188	1635	1646	327	307
20-24	1022	1133	188	100	833	1077	96	138	1163	1449	139	193
25-29	1252	1420	101	129	1091	1092	121	146	1127	1101	139	144
30-34	1256	1260	109	129	1158	1239	105	169	879	913	102	135
35-39	1202	1307	96	117	1262	1371	133	139	849	958	122	168
40-44	1110	1200	92	84	1200	1192	121	134	1048	1199	133	157
45-49	1017	1224	85	88	1061	1199	99	108	1261	1315	146	127
50-54	1056	1165	84	99	982	1179	86	88	1147	1100	122	132
55-59	974	1048	68	85	857	1108	69	81	910	1114	112	111
60-64	871	933	60	46	858	1002	53	76	832	1085	75	83
65-69	659	855	66	69	684	932	55	78	624	1051	60	70
70-74	520	625	46	40	569	792	46	41	524	893	40	64
75-79*	523	666	30	27	351	539	33	43	369	694	36	40
80-84*	0	0	0	0	204	319	17	17	235	433	17	19
85-UP	75	107	6	8	102	187	15	13	103	296	8	14
TOTALS	16487	18325	1458	1594	17525	19725	2197	2409	17391	19745	2600	2834
GRAND TOTAL				37864				41856				42570

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1074.0	1692.0	1.268		1074.0	1692.0	1.268		1074.0	1807.0	1.168	
CV-RENAL												
OBSERVED	637.0	981.0			637.0	981.0			637.0	1013.0		
EXPECTED*	483.8	830.3			483.8	830.3			483.8	953.9		
OBS/EXP	1.317	1.182			1.317	1.182			1.317	1.062		
HEART												
OBSERVED	457.0	697.0			457.0	697.0			457.0	657.0		
EXPECTED*	342.2	581.2			342.2	581.2			342.2	581.2		
OBS/EXP	1.336	1.199			1.336	1.199			1.336	0.994		
NON CV-R												
OBSERVED	437.0	711.0			437.0	711.0			437.0	794.0		
EXPECTED*	363.2	618.7			363.2	618.7			363.2	645.6		
OBS/EXP	1.203	1.149			1.203	1.149			1.203	1.230		
CANCER												
OBSERVED	160.0	267.0			160.0	267.0			160.0	325.0		
EXPECTED*	136.3	223.2			136.3	223.2			136.3	242.7		
OBS/EXP	1.174	1.196			1.174	1.196			1.174	1.339		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

ILLINOIS	
STATE	316
1950 RANK BY POPULATION	3864
1950 POP/50. MILE	3300
1970 POP/50. MILE	3292
1949 MED. FAM. INCOME	9665
1969 MED. FAM. INCOME	INDEPENDENT
URBAN CLASS	-
1950 URBAN AREA RANK	27
JAN MEAN TEMPERATURE	75
JULY MEAN TEMPERATURE	36
MEAN ANN. PRECIPITATION	M
LAND RESOURCE REGION	SURFACE
WATER SOURCE	232 PPM
TOTAL HARDNESS	52 PPM
NON-CARBONATE HARDNESS	FLUORIDATED IN 1955
FLUORIDATION STATUS	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	NM	NE	NF	NM	NE	NF	NM	NE	NF	NM	NE	NF	NM	NE	NF	NM	NE	NF
LT 1	621	603	48	732	773	106	644	644	105	644	644	135	644	644	135	644	644	135
1-4	2382	2386	167	3091	2919	406	3991	2919	398	2579	2536	548	2579	2536	548	2579	2536	548
5-9	2316	2239	186	3536	3442	458	3659	3454	439	3659	3454	742	3659	3454	742	3659	3454	742
10-14	1898	1978	147	3069	2913	312	3752	3636	293	3752	3636	672	3752	3636	672	3752	3636	672
15-19	1841	2167	118	2251	2499	231	2459	2499	217	3460	3603	553	3460	3603	553	3460	3603	553
20-24	2319	2570	128	1764	2241	164	203	2468	203	2628	3346	354	2628	3346	354	2628	3346	354
25-29	2414	2634	151	2061	2197	177	200	2586	200	2586	2581	322	2586	2581	322	2586	2581	322
30-34	2245	2509	113	2302	2398	167	220	1984	2116	243	311	243	1984	2116	243	1984	2116	243
35-39	2127	2405	131	2363	2526	194	207	2350	2127	193	260	193	2350	2127	193	2350	2127	193
40-44	2108	2246	115	2164	2441	155	170	2256	2511	209	260	209	2256	2511	209	2256	2511	209
45-49	1919	2180	95	2012	2335	129	153	2397	2853	190	202	190	2397	2853	190	2397	2853	190
50-54	1828	2009	74	1828	2178	114	144	2290	2514	146	185	146	2290	2514	146	2290	2514	146
55-59	1637	1839	59	1773	2138	102	80	1982	2328	127	165	127	1982	2328	127	1982	2328	127
60-64	1365	1536	40	1565	1816	73	60	1782	2131	123	141	123	1782	2131	123	1782	2131	123
65-69	1161	1367	27	1286	1694	36	60	1370	1964	54	84	54	1370	1964	54	1370	1964	54
70-74	762	1060	20	837	1341	28	35	943	1326	44	57	44	943	1326	44	943	1326	44
75-79	768	1091	17	784	1168	20	15	843	1241	15	20	15	843	1241	15	843	1241	15
80-84	0	0	0	221	382	10	8	439	820	15	31	15	439	820	15	439	820	15
85-89	122	189	7	221	382	10	8	296	618	15	31	15	296	618	15	296	618	15
TOTALS	29794	33010	1722	34132	37857	2937	3078	37822	42549	4759	5267	4759	37822	42549	4759	37822	42549	4759
GRAND TOTAL							78004					90397						

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1451.0	2529.0	0.578	1359.9	2565.5	0.530	2849.0	3208.3	0.888
CV-RENAL	787.0	1460.0	0.539	752.0	1480.8	0.508	1607.0	1897.5	0.847
HEART	571.0	983.0	0.581	534.5	1040.5	0.514	1091.0	1317.0	0.828
NON CV-R	664.0	1069.0	0.622	587.9	1104.6	0.533	1242.0	1311.8	0.947
CANCER	206.0	452.0	0.456	206.0	452.0	0.456	516.0	481.3	1.072

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	59-61 SUM	1970	1971	69-71 SUM	CODE		
TOTAL	741	710	846	833	850	2529	930	954	2849	ILLINOIS		
CV-RENAL	374	413	501	491	468	1460	535	537	1607	STATE		
HEART	271	300	333	346	304	983	364	356	1091	1950 POP. BY POPULATION		
NON CV-R	367	297	345	342	382	1069	430	395	1242	1950 POP./SQ. MILE		
CANCER	102	104	130	145	177	452	175	150	516	1970 POP./SQ. MILE		
										1949 MED. FAM. INCOME		
										1969 MED. FAM. INCOME		
										URBAN CLASS		
										1950 URBAN AREA RANK		
										JAN MEAN TEMPERATURE		
										JULY MEAN TEMPERATURE		
										MEAN ANN. PRECIPITATION		
										LAND RESOURCE REGION		
										WATER SOURCE		
										TOTAL HARDNESS		
										NON-CARBONATE HARDNESS		
										FLUORIDATION STATUS		
										GROUND AND SURFACE		
										100 PPM		
										56 PPM		
										FLOUORIDATED IN 1960		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	489	494	357	289	475	482	593	599
1-4	2012	1851	1314	1287	1876	1797	2219	2298
5-9	1924	1913	1364	1309	2219	2021	2378	2375
10-14	1679	1708	1125	1237	1818	1740	1923	1963
15-19	1622	1759	970	1093	1408	1490	1260	1389
20-24	1954	2184	909	1245	1042	1326	774	1231
25-29	2105	2283	986	1279	1192	1234	827	1263
30-34	1979	2138	945	1186	1345	1381	869	1339
35-39	2090	2215	1052	1294	1431	1536	912	1293
40-44	1929	2028	1043	1063	1319	1539	918	1125
45-49	1863	1908	942	935	1490	1597	1005	1144
50-54	1783	1733	750	678	1282	1433	860	956
55-59	1516	1592	562	461	1319	1452	828	844
60-64	1388	1401	341	343	1095	1258	540	575
65-69	1071	1161	311	284	948	1198	483	466
70-74	674	727	147	150	794	940	278	299
75-79*	598	758	123	129	461	623	164	173
80-84*	0	0	0	0	204	274	52	83
85-UP	77	119	18	29	103	167	48	57
TOTALS	26753	27972	13259	14311	21821	23488	16931	19472
GRAND TOTAL			82295				81712	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50			59-61			69-71		
	1949	1950	SUM	1959	1960	1961	1969	1970	SUM
TOTAL	1023	1020	2043	1143	1124	1077	1197	1070	3302
CV-RENAL	535	530	1065	679	653	617	639	637	1789
HEART	378	376	754	502	488	441	475	417	1318
NON CV-R	488	490	978	464	471	460	558	482	1513
CANCER	120	124	244	162	177	167	183	169	481

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*
CV-RENAL									
		1065.0	1065.0		1949.0	1949.0		1789.0	1789.0
		1376.2	1376.2		1376.2	1376.2		1358.9	1358.9
		1.337	1.337		1.416	1.416		1.317	1.317
HEART									
		754.0	754.0		1431.0	1431.0		1318.0	1318.0
		900.2	900.2		900.2	900.2		900.2	900.2
		1.353	1.353		1.515	1.515		1.464	1.464
NON CV-R									
		978.0	978.0		1995.0	1995.0		1513.0	1513.0
		1769.7	1769.7		1769.7	1769.7		1760.4	1760.4
		1.099	1.099		1.099	1.099		1.293	1.293
CANCER									
		244.0	244.0		506.0	506.0		481.0	481.0
		349.3	349.3		349.3	349.3		349.3	349.3
		1.021	1.021		1.297	1.297		1.377	1.377

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	ILLINOIS
1950 RANK BY POPULATION	135
1950 POP./SQ. MILE	6141
1970 POP./SQ. MILE	5036
1949 MED. FAM. INCOME	2933
1969 MED. FAM. INCOME	6654
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	9
JAN MEAN TEMPERATURE	33
JULY MEAN TEMPERATURE	80
FEAR ANN. PRECIPITATION	37
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	182 PPM
NON-CARBONATE HARDNESS	52 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1968

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	WM	WP
LT 1-	333	327	6	8
1-4	1373	1350	16	17
5-9	1362	1373	14	14
10-14	1036	1061	18	19
15-19	962	1092	22	32
20-24	1231	1431	52	32
25-29	1535	1617	67	31
30-34	1575	1693	51	39
35-39	1672	1792	52	28
40-44	1629	1832	38	30
45-49	1646	1798	35	21
50-54	1567	1720	35	18
55-59	1393	1448	36	16
60-64	1064	1326	18	15
65-69	845	1061	11	15
70-74	526	874	9	4
75-79*	577	953	5	0
80-84*	0	0	0	0
85-up	117	210	1	2
TOTALS	20445	22958	486	334
GRAND TOTAL				44,223

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	TOTAL	CV-RENN	HEART	NON CV	CANCER
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* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	451	422	873	495	515	490	1500	551	566	563	1680
CV-RENAL	226	239	465	298	305	268	871	339	329	296	939
HEART	154	170	324	222	227	198	647	230	240	201	680
NON CV-R	225	183	408	197	210	222	629	241	233	267	741
CANCER	80	79	159	89	81	96	266	110	83	106	299

CITY CHARACTERISTICS

STATE	ILLINOIS
1950 BANK BY POPULATION	266
1970 POP/SQ. MILE	5328
1970 POP/SQ. MILE	3814
1949 MED. FAM. INCOME	4037
1969 MED. FAM. INCOME	11555
URBAN CLASS	INDEPENDENT
1950 USBAN AREA BANK	-
JAN MEAN TEMPERATURE	22
JULY MEAN TEMPERATURE	73
MEAN ANNUAL PRECIPITATION	33
LAND RESOURCE REGION	L
GROUND	GROUND
WATER SOURCE	91 PPM
TOTAL HARDNESS	11 PPM
NON-CARBONATE HARDNESS	11 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1967

NON-CARBONATE HARDNESS
FLUORINATION STATUS
FLUORIDATED IN 1967

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP	WM	NP
TOTAL	288	250	15	12	352	341	22	14	226	245	24	19	937	893	66	82	1455	1417
1-4	1139	1184	36	38	1423	1389	73	89	937	893	66	82	1455	1417	127	105	1503	1510
5-9	1087	1154	32	41	1590	1615	92	88	1590	1615	92	88	1590	1615	115	104	1774	1743
10-14	907	903	48	24	1511	1378	67	53	1511	1378	67	53	1511	1378	112	110	1343	1431
15-19	932	1018	33	33	1180	1395	42	57	1180	1395	42	57	1180	1395	46	63	914	959
20-24	1094	1195	37	33	1042	1092	46	50	1042	1092	46	50	1042	1092	43	55	794	860
25-29	1121	1158	44	41	953	1016	61	60	953	1016	61	60	953	1016	43	47	818	889
30-34	993	1122	40	41	1075	1164	71	58	1075	1164	71	58	1075	1164	52	58	904	1014
35-39	989	1033	34	41	1178	1193	70	54	1178	1193	70	54	1178	1193	61	63	1075	1057
40-44	999	1051	38	47	1047	1124	55	51	1047	1124	55	51	1047	1124	40	47	875	1005
45-49	932	992	40	37	954	1071	41	38	954	1071	41	38	954	1071	36	40	857	989
50-54	960	1030	41	25	940	1019	44	37	940	1019	44	37	940	1019	34	39	792	943
55-59	873	911	26	32	862	1002	43	48	862	1002	43	48	862	1002	34	39	642	861
60-64	726	786	27	26	863	1077	30	23	863	1077	30	23	863	1077	14	17	576	861
65-69	581	728	25	24	735	921	35	33	735	921	35	33	735	921	17	27	383	664
70-74	417	502	13	18	571	801	25	26	571	801	25	26	571	801	13	15	238	421
75-79*	451	635	13	16	372	566	20	17	372	566	20	17	372	566	5	3	140	331
80-84*	0	0	0	0	188	278	8	12	188	278	8	12	188	278	955	936	16246	18093
85-UP	65	114	3	9	98	187	2	5	98	187	2	5	98	187	36290			
TOTALS	14554	15766	545	550	16934	18629	847	833	16934	18629	847	833	16934	18629	955	936	16246	18093
GRAND TOTAL				31425				37243										

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	796.0	1183.0	1296.0	796.0	1183.0	1296.0	796.0	1183.0	1296.0
CV-RENAL	497.0	728.0	767.0	497.0	728.0	767.0	497.0	728.0	767.0
HEART	345.0	514.0	591.0	345.0	514.0	591.0	345.0	514.0	591.0
NON CV-R	299.0	455.0	529.0	299.0	455.0	529.0	299.0	455.0	529.0
CANCER	105.0	182.0	229.0	105.0	182.0	229.0	105.0	182.0	229.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	1969-71	STATE	1950	1950	1950	1950	ILLINOIS
TOTAL	399	397	418	372	393	1183	1950	382	3571	3571	3571	3571
CV-RENAL	240	257	255	233	240	728	1950	POP/SQ. MILE	1970	POP/SQ. MILE	1970	POP/SQ. MILE
HEART	172	173	168	151	175	514	1949	MED. FAM. INCOME	1949	MED. FAM. INCOME	1949	MED. FAM. INCOME
NON CV-R	159	140	163	139	153	455	1969	MED. FAM. INCOME	1969	MED. FAM. INCOME	1969	MED. FAM. INCOME
CANCER	54	51	57	50	75	182	URBAN CLASS	URBAN CLASS	URBAN CLASS	URBAN CLASS	URBAN CLASS	URBAN CLASS
							1950	URBAN AREA	1950	URBAN AREA	1950	URBAN AREA
							JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE
							JULY MEAN TEMPERATURE	JULY MEAN TEMPERATURE	JULY MEAN TEMPERATURE	JULY MEAN TEMPERATURE	JULY MEAN TEMPERATURE	JULY MEAN TEMPERATURE
							MEAN ANNU. PRECIPITATION	MEAN ANNU. PRECIPITATION	MEAN ANNU. PRECIPITATION	MEAN ANNU. PRECIPITATION	MEAN ANNU. PRECIPITATION	MEAN ANNU. PRECIPITATION
							LAND RESOURCE REGION	LAND RESOURCE REGION	LAND RESOURCE REGION	LAND RESOURCE REGION	LAND RESOURCE REGION	LAND RESOURCE REGION
							WATER SOURCE	WATER SOURCE	WATER SOURCE	WATER SOURCE	WATER SOURCE	WATER SOURCE
							TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS
							NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS
							FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS
							GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE
							310 PPM	310 PPM	310 PPM	310 PPM	310 PPM	310 PPM
							82 PPM	82 PPM	82 PPM	82 PPM	82 PPM	82 PPM
							UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN

POPULATION

BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LIT 1	307	339	0	0	524	499	1	0	394	353	2	1
1-4	1287	1250	0	0	2062	2038	3	2	1400	1389	5	4
5-9	1147	1157	0	0	2228	2255	2	3	2145	2033	8	8
10-14	1014	1005	2	2	1790	1854	1	2	2237	2148	12	7
15-19	982	1088	0	0	1170	1343	14	0	1771	1948	5	10
20-24	1257	1337	3	4	1222	1318	24	3	1305	1633	7	4
25-29	1395	1321	10	8	1373	1423	10	8	1201	1297	4	6
30-34	1171	1214	1	1	1518	1637	5	6	1025	1131	3	8
35-39	1098	1055	2	0	1504	1474	2	2	1076	1202	5	5
40-44	1029	1051	0	0	1302	1295	0	0	1292	1387	8	6
45-49	966	937	0	0	1096	1078	1	0	1289	1317	4	4
50-54	824	750	0	1	1028	1058	0	0	1131	1145	0	3
55-59	710	711	1	0	860	976	0	0	937	946	0	1
60-64	605	552	1	1	653	609	0	1	754	922	2	1
65-69	424	430	0	0	509	564	0	0	545	733	5	2
70-74	296	266	0	0	393	471	0	0	389	551	1	1
75-79#	226	248	0	0	235	278	0	0	257	420	1	0
80-84#	25	34	0	0	107	113	0	0	134	247	0	1
85-UP	25	34	0	0	55	71	0	0	87	127	0	0
TOTALS	14700	14745	10	10	19629	20354	63	27	19369	20929	70	72
GRAND TOTAL				29465				40073				40440

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE		1949-50	1959-61	1969-71
TOTAL	OBSERVED	477.0	940.0	1119.0
	EXPECTED*	440.0	903.5	1076.7
	OBS/EXP	1.084	1.040	1.039
CV-RENAL	OBSERVED	248.0	520.0	629.0
	EXPECTED*	228.0	469.6	603.5
	OBS/EXP	1.088	1.107	1.042
HEART	OBSERVED	177.0	390.0	452.0
	EXPECTED*	167.1	340.7	430.5
	OBS/EXP	1.059	1.145	1.050
NON CV-R	OBSERVED	229.0	420.0	490.0
	EXPECTED*	212.0	433.9	473.2
	OBS/EXP	1.080	0.968	1.036
CANCER	OBSERVED	65.0	156.0	199.0
	EXPECTED*	74.3	147.6	174.1
	OBS/EXP	0.875	1.057	1.143

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	452	418	24	22	708	689	65	79	633	565	121	140
1-4	1723	1749	88	84	2625	2637	269	274	2241	2154	548	506
5-9	1795	1755	70	86	2877	2924	239	258	3208	3038	669	733
10-14	1531	1499	62	78	2587	2517	208	192	3418	3232	697	695
15-19	1339	1630	59	73	2040	2283	153	125	3115	3320	609	500
20-24	1510	1940	80	112	1741	1980	194	148	2480	3105	368	517
25-29	1857	2056	105	112	1936	1691	383	156	2308	2063	334	408
30-34	1842	1943	76	75	2024	1932	366	161	1726	1682	296	292
35-39	1832	1990	71	76	2109	2192	240	126	1699	1760	215	300
40-44	1847	1865	74	66	2032	2083	158	103	1974	2117	239	238
45-49	1609	1761	71	70	1964	2065	124	81	2178	2337	198	207
50-54	1642	1685	50	43	1837	1862	99	80	2098	2179	131	146
55-59	1508	1532	42	44	1543	1682	81	75	1879	2080	117	117
60-64	1319	1240	41	20	1380	1544	52	42	1630	1830	86	92
65-69	925	1037	19	27	1133	1347	33	35	1119	1566	68	88
70-74	576	737	14	13	901	1076	43	31	950	1398	30	64
75-79#	546	723	9	5	495	675	8	11	615	1056	18	28
80-84#	0	0	0	0	203	401	6	5	392	710	20	11
85-UP	84	139	0	4	126	236	3	7	197	452	7	21
TOTALS	23937	25699	955	1010	30261	31816	2724	1979	33860	36644	4771	5103
GRAND TOTAL				51601				66780				80378

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1404.0	2250.0	2668.0	1014.1	2010.9	2685.5	1014.1	2010.9	2685.5
	1.384	1.119	0.993						
CV-RENAL									
	744.0	1324.0	1545.0	565.5	1114.2	1556.6	565.5	1114.2	1556.6
	1.316	1.188	0.991						
HEART									
	545.0	989.0	1161.0	406.7	794.1	1086.7	406.7	794.1	1086.7
	1.340	1.245	1.066						
NON CV-R									
	660.0	926.0	1123.0	448.6	896.7	1126.9	448.6	896.7	1126.9
	1.471	1.033	0.997						
CANCER									
	214.0	361.0	434.0	168.9	320.6	408.0	168.9	320.6	408.0
	1.267	1.126	1.064						

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	J-9-71 SUM	STATE	ILLINOIS		
TOTAL	708	696	1404	2250	889	919	860	2668	1950 RANK BY POPULATION	222	6701	
CV-RENAL	359	385	744	1324	452	500	538	1545	1950 POP/50. MILE	4871	4871	
HEART	253	292	545	999	323	327	339	989	1970 POP/50. MILE	3852	3852	
NON CV-R	349	311	660	926	291	291	344	966	1949 MED. FAM. INCOME	11233	11233	
CANCER	105	109	214	361	111	116	134	361	1969 MED. FAM. INCOME	INDEPENDENT	INDEPENDENT	
									URBAN CLASS			
									1950 URBAN AREA RANK			
									JAN MEAN TEMPERATURE	23	23	
									JULY MEAN TEMPERATURE	73	73	
									MEAN ANN. PRECIPITATION	34	34	
									LAND RESOURCE REGION	M	M	
									WATER SOURCE	GROUND	GROUND	
									TOTAL HARDNESS	361 PPM	361 PPM	
									NON-CARBONATE HARDNESS	79 PPM	79 PPM	
									FLOUORIDATION STATUS	NO ARTIFICIAL	OPTIMUM NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
1T 1	250	244	17	13	262	274	44	53
1-4	969	939	68	59	1031	1051	215	208
5-9	976	929	69	54	1226	1202	186	217
10-14	724	773	43	60	1065	1101	130	137
15-19	699	773	43	36	827	928	94	92
20-24	807	1001	46	68	631	772	66	107
25-29	943	999	63	74	668	637	79	108
30-34	960	985	57	58	732	759	93	102
35-39	880	958	47	44	806	829	84	99
40-44	847	901	32	41	753	865	56	65
45-49	782	840	52	42	779	947	53	55
50-54	708	778	29	30	696	763	33	63
55-59	604	713	25	22	546	680	31	38
60-64	559	598	23	15	467	589	29	26
65-69	455	483	14	12	402	603	24	16
70-74	301	373	7	6	337	504	20	15
75-79*	302	405	6	9	232	347	9	6
80-84*	0	0	0	0	115	223	0	4
85-UP	54	106	3	1	68	148	3	4
TOTALS	11820	12748	644	644	11823	13171	1262	1410
GRAND TOTAL				25856				27666

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	307	275	582	361	343	340	1044	328	368	355	1051
CV-RENAL	167	152	319	216	220	174	610	180	226	211	617
HEART	127	113	240	148	161	113	422	127	178	166	471
NON CV-R	140	123	263	145	123	166	434	148	142	144	434
CANCER	57	44	101	52	45	65	162	62	69	63	194

CITY CHARACTERISTICS

CODE

STATE	ILLINOIS
1950 RANK BY POPULATION	4277
1950 POP/SQ. MILE	577
1940 POP/SQ. MILE	3672
1940 MED. INCOME	3633
1969 MED. INCOME	10442
URBAN CLASS. INCOME	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	25
JULY MEAN TEMPERATURE	75
MEAN ANNUAL PRECIPITATION	33
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	75 PPM
NON-CARBONATE HARDNESS	47 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1964

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	220	189	25	121	227	257	73	95	144	145	137	162
1-4	899	879	127	29	896	853	325	322	556	565	548	547
5-9	908	868	95	96	947	884	321	339	799	766	810	741
10-14	792	732	97	101	934	943	310	242	852	815	827	919
15-19	707	780	72	115	654	734	158	170	727	685	559	645
20-24	853	974	119	129	629	653	196	218	635	676	446	568
25-29	935	947	167	139	634	599	187	230	558	515	439	481
30-34	859	880	99	147	670	649	237	237	463	484	437	545
35-39	832	1024	115	105	632	701	210	221	426	419	416	496
40-44	855	1018	83	88	636	678	185	182	435	490	475	419
45-49	914	1047	89	45	653	828	145	109	492	539	319	344
50-54	919	927	58	60	668	714	98	140	473	518	248	252
55-59	812	784	41	30	694	765	100	94	458	544	180	179
60-64	594	617	17	17	635	660	56	52	427	475	102	138
65-69	425	441	21	34	425	533	37	35	332	436	96	94
70-74	255	329	11	12	294	470	18	26	227	349	42	58
75-79*	213	379	8	23	174	286	11	13	168	241	18	25
80-84*	0	0	0	0	172	176	6	9	99	162	5	16
85-UP	47	99	3	1	35	117	3	7	45	105	6	21
TOTALS	12039	12914	1226	1294	10563	11447	2576	2744	8371	8915	6100	6650
GRAND TOTAL				27473				27330				30036

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	300	259	559	278	270	245	793	271	274	262	807
CV-RENAL	168	154	322	169	161	145	475	151	152	156	459
HEART	133	113	246	128	121	118	367	110	134	134	364
NON CV-R	132	105	237	109	109	100	318	120	122	106	348
CANCER	57	51	108	48	47	42	137	44	43	31	118

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	ILLINOIS
1950 BANK BY POPULATION	449
1950 POP./SQ. MILE	9812
1970 POP./SQ. MILE	11124
1949 MED. FAM. INCOME	4449
1969 MED. FAM. INCOME	11573
URBAN CLASS	PRINCE
1950 URBAN AREA RANK	2
JAN MEAN TEMPERATURE	24
JULY MEAN TEMPERATURE	74
MEAN ANN. PRECIPITATION	32
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	133 PPM
NON-CARBONATE HARDNESS	23 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1956

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	363	363	2	5	427	446	3	7
1-4	1494	1433	12	16	1768	1618	16	15
5-9	1400	1445	8	9	1966	1958	16	23
10-14	1068	1104	13	3	1955	1800	19	13
15-19	1362	1371	16	9	1385	1594	14	9
20-24	1522	1373	16	9	1052	1290	7	15
25-29	1383	1340	16	10	1122	1130	10	10
30-34	1009	1500	12	11	1226	1293	14	14
35-39	1406	1476	14	7	1302	1368	7	6
40-44	1393	1396	5	9	1381	1569	19	19
45-49	1214	1244	14	10	1422	1563	11	10
50-54	1082	1081	8	8	1306	1322	7	4
55-59	1035	1053	11	10	1120	1180	13	14
60-64	946	965	8	7	923	1021	6	7
65-69	740	806	4	7	796	1005	7	5
70-74	499	568	3	1	628	778	4	11
75-79*	453	564	6	4	413	541	1	5
80-84*	0	0	0	0	190	283	2	1
85-UP	62	98	0	0	94	142	2	1
TOTALS	18023	19080	158	136	20419	21921	176	189
GRAND TOTAL				37397				42705

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	818.0	1431.0	1525.0		
TOTAL	EXPECTED*	756.9	1372.0	1573.0		
	OBS/EXP	1.081	1.043	0.970		
CV-RENAL						
	OBSERVED	443.0	885.0	923.0		
	EXPECTED*	425.7	784.2	929.5		
	OBS/EXP	1.041	1.129	0.993		
HEART						
	OBSERVED	322.0	638.0	701.0		
	EXPECTED*	306.4	560.5	654.3		
	OBS/EXP	1.051	1.138	1.071		
NON CV-R						
	OBSERVED	375.0	546.0	602.0		
	EXPECTED*	331.2	587.8	643.5		
	OBS/EXP	1.132	0.929	0.936		
CANCER						
	OBSERVED	135.0	238.0	275.0		
	EXPECTED*	125.5	224.0	247.4		
	OBS/EXP	1.076	1.063	1.111		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	ILLINOIS
1950 RANK BY POPULATION	321
1950 POP/SQ. MILE	5267
1970 POP/SQ. MILE	4128
1949 MED. FAM. INCOME	3908
1969 MED. FAM. INCOME	11025
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	63
JAN MEAN TEMPERATURE	23
JULY MEAN TEMPERATURE	75
MEAN ANN. PRECIPITATION	33
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	59 PPM
NON-CARBONATE HARDNESS	34 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1955

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	497	434	0	2	523	527	2	1	398	460	9	10
1-4	1986	1843	4	4	1880	1839	14	2	1615	1520	25	35
5-9	2003	2024	3	3	2300	2201	14	9	2428	2304	36	38
10-14	1609	1624	9	3	2299	2210	4	4	2687	2635	37	22
15-19	1481	1778	3	3	1775	2031	6	4	2385	2294	33	25
20-24	1678	2131	9	6	1330	1730	3	8	2024	2640	23	61
25-29	1996	2159	10	15	1652	1566	17	12	1951	1665	46	38
30-34	1827	2243	3	4	1573	1596	14	9	1320	1283	33	28
35-39	1970	2479	6	5	1586	1814	11	18	1391	1293	25	16
40-44	2067	2832	3	10	1656	2152	13	5	1593	1932	18	10
45-49	2363	2999	3	3	1939	2477	3	5	1670	2076	10	17
50-54	2422	2736	2	2	1927	2640	3	3	1559	2250	8	6
55-59	2202	2639	5	4	1780	2288	5	5	1516	2378	10	4
60-64	1247	1723	5	3	1382	2070	2	4	1247	2083	1	7
65-69	798	1259	1	1	991	1584	2	2	1015	1826	2	5
70-74	768	1261	1	1	594	1084	1	2	680	1349	2	4
75-79*	0	0	0	0	284	561	0	0	371	831	1	2
80-84*	0	0	0	0	175	388	0	0	221	527	1	5
85-UP	126	237	0	0	175	388	0	0	221	527	1	5
TOTALS	28801	34581	75	72	27495	33391	119	98	27800	33977	363	371
GRAND TOTAL				63529				61093				62511

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1489.0	1453.1	1.025	2314.0	2428.4	0.953	2307.0	2669.0	0.864
CV-RENAL	919.0	1458.0	0.624	1374.0	1640.7	0.837			
HEART	671.0	1087.0	0.618	1010.0	1143.5	0.883			
NON CV-R	570.0	856.0	0.666	933.0	1028.3	0.907			
CANCER	280.0	461.0	0.607	479.0	415.2	1.154			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	497	434	0	2	523	527	2	1	398	460	9	10
1-4	1986	1843	4	4	1880	1839	14	2	1615	1520	25	35
5-9	2003	2024	3	3	2300	2201	14	9	2428	2304	36	38
10-14	1609	1624	9	3	2299	2210	4	4	2687	2635	37	22
15-19	1481	1778	3	3	1775	2031	6	4	2385	2294	33	25
20-24	1678	2131	9	6	1330	1730	3	8	2024	2640	23	61
25-29	1996	2159	10	15	1652	1566	17	12	1951	1665	46	38
30-34	1827	2243	3	4	1573	1596	14	9	1320	1283	33	28
35-39	1970	2479	6	5	1586	1814	11	18	1391	1293	25	16
40-44	2067	2832	3	10	1656	2152	13	5	1593	1932	18	10
45-49	2363	2999	3	3	1939	2477	3	5	1670	2076	10	17
50-54	2422	2736	2	2	1927	2640	3	3	1559	2250	8	6
55-59	2202	2639	5	4	1780	2288	5	5	1516	2378	10	4
60-64	1247	1723	5	3	1382	2070	2	4	1247	2083	1	7
65-69	798	1259	1	1	991	1584	2	2	1015	1826	2	5
70-74	768	1261	1	1	594	1084	1	2	680	1349	2	4
75-79*	0	0	0	0	284	561	0	0	371	831	1	2
80-84*	0	0	0	0	175	388	0	0	221	527	1	5
85-UP	126	237	0	0	175	388	0	0	221	527	1	5
TOTALS	28801	34581	75	72	27495	33391	119	98	27800	33977	363	371
GRAND TOTAL				63529				61093				62511

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

CITY CHARACTERISTICS

STATE	CODE
ILLINOIS	188
1950 BANK BY POPULATION	13517
1950 POP/50. MILE	1300
1970 POP/50. MILE	1300
1949 MED. FAR. INCOME	15825
1969 MED. FAR. INCOME	15825
URBAN CLASS	PRINCE
1950 URBAN AREA BANK	24
JAL. MEAN PRECIPITATION	74
JAL. MAX. PRECIPITATION	74
MEAN ANNU. PRECIPITATION	32
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	133 PPM
NON-CARBONATE HARDNESS	23 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1956

POPULATION BY AGE, RACE, SEX AND CENSUS YEAR													DEATHS AND DEATH RATIOS BY CAUSE AND CENSUS PERIOD							
AGE GROUP	1950						1960						CAUSE	1949-50		1959-61		1969-71		
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP		TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*
LT 1	964	981	81	77	1058	944	167	169	884	896	228	212								
5-9	3806	3790	299	328	3584	3532	660	679	3446	3337	811	883								
10-14	3790	3515	272	286	4007	3922	731	714	4945	4766	1043	1060								
15-19	3214	3130	238	224	3689	3698	510	529	5155	5066	940	943								
20-24	3407	3720	159	168	3437	3621	325	383	5382	5542	812	860								
25-29	5032	4495	287	295	3227	3258	273	358	4589	5284	516	769								
30-34	4419	4313	308	304	3822	2502	267	356	3543	3444	438	541								
35-39	3770	4008	234	281	2552	2630	286	351	2699	2847	410	490								
40-44	3806	4149	257	244	2636	2819	325	338	2632	2787	327	372								
45-49	3748	3817	222	181	2645	3022	284	302	3081	3325	304	390								
50-54	3501	3539	170	139	2891	3177	238	239	3244	3474	308	321								
55-59	3176	3279	136	113	2808	3022	186	159	2940	3384	258	329								
60-64	2784	2884	92	85	2667	2786	133	148	2921	3335	241	253								
65-69	2356	2634	82	55	2233	2554	117	104	2582	2980	178	199								
70-74	1832	2160	66	65	1810	2379	80	112	1956	2521	129	160								
75-79#	1210	1508	29	34	1357	1983	55	65	1410	2172	91	104								
80-84#	0	0	0	0	921	1380	38	41	922	1743	51	79								
85-UP	169	331	4	5	224	467	16	13	303	670	23	36								
TOTALS	52094	53847	2965	2950	44987	48399	4700	5076	53148	58633	7137	8045								
GRAND TOTAL																				
* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED																				
* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES																				

CAUSE	CITY CHARACTERISTICS				CODE
	STATE	POPULATION	MILE	ILLINOIS	
CV-RENAL	1950	POP/SG.	1970	POP/SG.	8671
HEART	1950	POP/SG.	1970	POP/SG.	3395
NON CV-R	1950	POP/SG.	1970	POP/SG.	3600
CANCER	1950	POP/SG.	1970	POP/SG.	10667
	1950	POP/SG.	1970	POP/SG.	CENTRAL
	1950	POP/SG.	1970	POP/SG.	79
	1950	POP/SG.	1970	POP/SG.	25
	1950	POP/SG.	1970	POP/SG.	75
	1950	POP/SG.	1970	POP/SG.	35
	1950	POP/SG.	1970	POP/SG.	M
	1950	POP/SG.	1970	POP/SG.	GROUND
	1950	POP/SG.	1970	POP/SG.	425
	1950	POP/SG.	1970	POP/SG.	425
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
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	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104
	1950	POP/SG.	1970	POP/SG.	104

[illegible]

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
1T-1	895	873	33	40	1446	1368	92	88
1-4	3339	3273	124	115	5462	5327	395	382
5-9	3252	3260	116	103	6134	5962	374	356
10-14	2868	2372	87	85	5280	5187	243	249
15-19	2237	2787	67	75	3583	4433	179	204
20-24	2848	3603	115	138	3035	3592	179	230
25-29	3598	3898	144	143	3682	3672	181	218
30-34	3506	3672	120	136	3206	3072	201	218
35-39	3207	3539	107	113	3206	4064	205	195
40-44	3239	3337	81	76	3755	4004	135	113
45-49	2867	3026	81	71	3071	3755	133	161
50-54	2708	3026	77	53	3233	3374	108	97
55-59	2708	2812	46	50	2557	3130	77	84
60-64	2330	2343	30	32	2535	2807	63	52
65-69	1808	1883	28	16	2171	2610	41	44
70-74	1074	1285	16	14	1595	2076	25	31
75-79	974	1363	9	9	1050	1316	19	17
80-84	0	0	0	0	509	768	6	12
85-UP	160	261	0	4	232	504	4	10
TOTALS	43659	46700	1289	1279	58313	62943	2636	2814
GRAND TOTAL				92927				126706

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1998.0	1846.7	1.082		3760.0	3823.9	0.983		4389.0	4800.7	0.914	
CV-RENAL	1049.0	1028.5	1.020		2051.0	2142.5	0.957		2364.0	2792.3	0.847	
HEART	724.0	740.0	0.978		1445.0	1523.3	0.949		1644.0	1946.9	0.844	
NON CV-R	949.0	818.2	1.160		1709.0	1681.4	1.016		2025.0	2008.4	1.008	
CANCER	313.0	305.9	1.023		676.0	605.3	1.117		768.0	720.6	1.066	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	1959	1961	1969	1970	1971	1971	STATE	ILLINOIS		
TOTAL	997	1001	1208	1257	1874	1824	1891	SUR	STATE RANK BY POPULATION	119		
CV-RENAL	328	351	481	460	703	755	816	SUR	1950 POP./SQ. MILE	6638		
HEART	469	355	565	460	546	531	567	SUR	1950 POP./SQ. MILE	4309		
NON CV-R	469	355	565	460	546	531	567	SUR	1949 MED. FAM. INCOME	3992		
CANCER	153	160	211	207	260	236	272	SUR	1963 MED. FAM. INCOME	10334		
								SUR	URBAN CLASS	CENTRAL		
								SUR	1950 URBAN AREA RANK	102		
								SUR	JAN MEAN TEMPERATURE	18		
								SUR	JULY MEAN TEMPERATURE	72		
								SUR	MEAN ANN. PRECIPITATION	34		
								SUR	LAND RESOURCE REGION	L		
								SUR	WATER SOURCE	GROUND		
								SUR	TOTAL HARDNESS	352 PPM		
								SUR	NON-CARBONATE HARDNESS	43 PPM		
								SUR	FLUORIDATION STATUS	FLUORIDATED IN 1966		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	455	471	14	12	508	511	50	44	335	311	67	85
5-9	1850	1674	69	46	2074	1845	180	185	1350	1290	347	314
10-14	1830	1699	77	61	2368	2218	219	182	1954	1873	437	352
15-19	1390	1430	61	60	2104	2020	137	111	2062	1947	335	313
20-24	1326	1549	22	19	1600	1820	86	97	2191	2235	240	242
25-29	1627	1877	59	64	1363	1493	110	116	1636	1959	161	259
30-34	1698	1924	73	66	1308	1339	102	116	1263	1289	177	214
35-39	1832	1903	71	73	1432	1498	108	113	1017	1014	170	184
40-44	1871	1832	51	49	1587	1735	101	74	973	1099	116	127
45-49	1725	1785	46	44	1621	1690	77	70	1211	1337	117	134
50-54	1599	1517	51	37	1640	1694	71	74	1408	1534	114	112
55-59	1443	1465	48	32	1524	1585	55	42	1335	1482	96	80
60-64	1305	1265	35	14	1340	1377	54	38	1235	1445	77	83
65-69	1085	1110	24	15	1066	1278	33	33	1149	1314	52	54
70-74	823	905	25	12	921	1022	17	16	827	1108	43	44
75-79	570	681	9	10	678	906	17	21	579	931	21	22
80-84	527	633	9	6	426	598	16	8	394	648	8	12
85-UP	81	134	2	1	224	334	6	8	214	448	7	10
TOTALS	23459	23854	746	651	23943	25136	1443	1341	21376	23555	2589	2646
GRAND TOTAL				48710				51863				50166

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1056.0	1654.0	1728.0		1056.0	1654.0	1728.0		1056.0	1654.0	1728.0	
CV-RENAL	567.0	986.0	1040.0		567.0	986.0	1040.0		567.0	986.0	1040.0	
HEART	402.0	707.0	803.0		402.0	707.0	803.0		402.0	707.0	803.0	
NON CV-R	489.0	668.0	688.0		489.0	668.0	688.0		489.0	668.0	688.0	
CANCER	150.0	272.0	303.0		150.0	272.0	303.0		150.0	272.0	303.0	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	ILLINOIS		
1950 RANK BY POPULATION	240		
1950 POP/SQ. MILE	4639		
1970 POP/SQ. MILE	3609		
1949 MED. FAM. INCOME	3715		
1969 MED. FAM. INCOME	10495		
URBAN CLASS	CENTRAL		
1950 URBAN AREA RANK	63		
JAN MEAN TEMPERATURE	23		
JULY MEAN TEMPERATURE	73		
MEAN ANNUAL PRECIPITATION	34		
LAND RESERVE REGION	M		
WATER SOURCE	SURFACE		
TOTAL HARDNESS	215 PPM		
NON-CARBONATE HARDNESS	109 PPM		
FLUORIDATION STATUS	FLUORIDATED IN 1963		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NP	WM	WF	NH	NP
1st-4	672	641	40	38	776	744	89	81
5-9	2842	2665	170	185	3037	3263	332	315
10-14	2597	2657	178	166	3445	3265	332	302
15-19	2314	2195	144	150	3087	3039	258	252
20-24	2088	2537	122	130	2132	2858	177	196
25-29	2466	3197	140	175	1919	2657	118	194
30-34	2781	3253	156	209	2071	2161	150	155
35-39	2663	3137	105	178	2117	2359	169	213
40-44	2777	3277	176	186	2255	2653	152	195
45-49	2700	3164	181	170	2162	2691	120	173
50-54	2523	2963	145	143	2404	2913	170	190
55-59	2243	2591	129	130	2231	2748	122	144
60-64	2034	2367	103	114	2110	2638	155	157
65-69	1820	2110	88	84	1728	2264	98	130
70-74	1465	1712	84	79	1471	2087	82	113
75-79*	1018	1266	58	57	1221	1768	74	66
80-84*	940	1272	47	39	796	1184	54	50
85-UP	146	234	6	8	402	659	35	48
TOTALS	36089	41228	2072	2239	35590	41982	2702	2997
GRAND TOTAL				81628				83271

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1971				69-71	
	1949	1950	49-50	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM	1971	SUM	SUM	SUM	SUM	SUM
TOTAL	1101	1078	2179	5257	1145	1149	1166	3460	1199	1242	1247	3688	1247	1247	1247	3688	3688	3688
CV-RENAL	585	605	1190	3380	687	683	686	2056	700	730	732	2162	732	732	732	2162	2162	2162
HEART	433	431	864	1728	496	500	508	1504	512	517	547	1576	547	547	547	1576	1576	1576
NON CV-R	516	473	989	1978	458	466	480	1404	499	512	515	1526	515	515	515	1526	1526	1526
CANCER	175	181	356	712	215	192	195	602	210	210	194	614	194	194	194	614	614	614

CITY CHARACTERISTICS

CODE

STATE	ILLINOIS
1950 BANK BY POPULATION	137
1950 POP/SQ. MILE	7849
1970 POP/SQ. MILE	3641
1949 MED. FAM. INCOME	3446
1969 MED. FAM. INCOME	10339
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	122
JAN MEAN TEMPERATURE	27
JULY MEAN TEMPERATURE	76
MEAN ANN. PRECIPITATION	36
LAND RESOURCE REGION	H
WATER SOURCE	SURFACE
TOTAL HARDNESS	69 PPM
NON-CARBONATE HARDNESS	39 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1968

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL
CV-RENAL	1190.0	2056.0	1.248	1190.0	1190.0	2056.0	1.248	1190.0	2179.0	3460.0	1.137	2179.0
HEART	864.0	1504.0	1.274	864.0	864.0	1504.0	1.274	864.0	1696.3	3044.4	1.137	1696.3
NON CV-R	989.0	1404.0	1.349	989.0	989.0	1404.0	1.349	989.0	1774.7	2099.8	1.159	1774.7
CANCER	356.0	602.0	1.293	356.0	356.0	602.0	1.293	356.0	585.0	1033.9	1.093	585.0
TOTALS	2776.0	4062.0	1.254	2776.0	2776.0	4062.0	1.254	2776.0	5257.7	9153.2	1.159	5257.7

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	349	330	25	26	712	656	93	94	610	546	107	98
1-4	1375	1404	107	89	2518	2429	311	322	1912	1949	432	438
5-9	1433	1319	96	89	2639	2675	274	318	2793	2643	646	645
10-14	1116	1073	79	59	2158	2155	167	203	2778	2646	517	574
15-19	1066	1145	73	87	1519	1642	127	130	2304	2422	378	442
20-24	1366	1462	124	130	1359	1706	178	226	2244	2674	308	405
25-29	1561	1601	141	145	1673	1774	204	221	2036	2027	321	380
30-34	1529	1574	122	130	1914	1758	206	215	1654	1583	320	360
35-39	1468	1578	92	94	1945	1938	154	190	1471	1514	247	300
40-44	1358	1415	87	83	1721	1788	133	139	1675	1675	274	280
45-49	1377	1218	73	58	1629	1695	98	117	1696	1832	170	232
50-54	1171	1099	70	49	1408	1433	74	92	1595	1716	156	162
55-59	1057	983	45	31	1197	1207	81	67	1453	1634	113	150
60-64	830	747	26	30	982	997	46	39	1101	1255	81	117
65-69	522	569	20	24	754	843	37	42	761	972	68	82
70-74	373	382	10	9	470	603	22	23	501	776	46	44
75-79#	257	364	10	6	259	374	9	12	379	608	16	36
80-84#	0	0	0	0	104	152	5	8	169	329	13	15
85-89#	40	82	2	3	49	121	5	1	109	221	13	20
TOTALS	18248	18345	1202	1151	25050	25986	2224	2459	27241	29022	4226	4780
GRAND TOTAL				38946				55719				65269

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DENSITY RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL												
		375.0				751.0				964.0		
		333.0				682.7				944.3		
		1.126				1.100				1.021		
HEART												
		275.0				582.0				723.0		
		241.4				491.7				665.3		
		1.139				1.184				1.087		
NON CV-R												
		367.0				669.0				789.0		
		298.3				656.2				795.1		
		1.230				1.020				0.992		
CANCER												
		122.0				233.0				267.0		
		105.3				213.8				270.5		
		1.159				1.030				0.967		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949				1959				1961				1971			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	378	364	742	491	491	440	489	1420	586	538	629	1753	629	538	629	1753
1-4	191	184	375	258	258	243	250	751	337	298	329	964	329	298	329	964
5-9	146	129	275	195	195	191	196	582	266	213	246	723	246	213	246	723
10-14	187	180	367	233	233	197	239	669	249	240	300	789	300	240	300	789
15-19	57	65	122	87	87	67	79	233	80	75	112	267	112	75	112	267
20-24																
25-29																
30-34																
35-39																
40-44																
45-49																
50-54																
55-59																
60-64																
65-69																
70-74																
75-79#																
80-84#																
85-89#																
TOTALS	18248	18345	1202	1151	25050	25986	2224	2459	27241	29022	4226	4780	27241	29022	4226	4780
GRAND TOTAL				38946				55719				65269				65269

CITY CHARACTERISTICS

CODE

STATE	ILLINOIS
1950 RANK BY POPULATION	305
1950 POP/SQ. MILE	4057
1970 POP/SQ. MILE	4054
1949 MED. FAM. INCOME	4219
1969 MED. FAM. INCOME	11478
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	22
JULY MEAN TEMPERATURE	71
MEAN ANN. PRECIPITATION	31
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	126 PPM
NON-CARBONATE HARDNESS	29 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NN	NF	WM	WF	NN	NF	WM	WF	NN	NF
LT 1	472	426	25	46	534	494	82	85	541	556	112	105
1-4	1762	1757	130	119	1991	1886	287	309	2324	2146	407	394
5-9	1765	1686	110	117	2145	2018	307	293	2935	2919	500	556
10-14	1334	1606	96	78	1842	1896	252	252	2917	2759	494	515
15-14	1334	1570	79	78	1547	1658	137	189	2784	2862	379	394
20-24	1479	2000	88	112	1474	1977	117	156	2626	3124	312	345
25-29	1846	2103	97	107	1473	1404	159	165	2300	2110	224	285
30-34	1690	1855	84	96	1410	1416	126	151	1631	1786	177	207
35-39	1632	1734	86	80	1356	1496	143	131	1625	1621	180	189
40-44	1607	1645	81	71	1263	1436	113	124	1727	1925	163	201
45-49	1330	1371	59	63	1253	1405	102	100	1821	2060	150	150
50-54	1209	1254	48	41	1086	1235	83	75	1657	1989	116	117
55-59	1003	1103	39	41	1086	1235	65	63	1580	1799	113	107
60-64	887	985	34	29	890	1050	48	42	1390	1578	86	98
65-69	723	867	28	32	692	905	44	45	959	1257	68	66
70-74	492	593	17	10	544	776	35	31	678	1002	33	44
75-79*	489	567	17	22	364	575	16	28	408	748	11	48
80-84*	0	0	0	0	204	285	9	9	233	486	10	20
85-UP	66	112	1	2	105	185	6	8	161	363	15	11
TOTALS	21455	23078	1136	1151	21424	23250	2131	2256	30297	33088	3550	3852
GRAND TOTAL				46820				49061				70787

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	990.0	1799.0	1.799	940.1	1486.7	1.210	2061.0	2104.4	0.979
CV-RENAL									
OBSERVED	535.0	1048.0	1.087						
EXPECTED*	458.4	1192.4	1.268						
OBS/EXP	1.167	1.268	0.912						
HEART									
OBSERVED	352.0	725.0	1.738						
EXPECTED*	327.5	582.6	0.884						
OBS/EXP	1.075	1.244	0.884						
NON CV-R									
OBSERVED	455.0	751.0	1.662						
EXPECTED*	381.8	660.2	1.738						
OBS/EXP	1.192	1.138	1.068						
CANCER									
OBSERVED	135.0	248.0	1.837						
EXPECTED*	135.7	230.0	1.078						
OBS/EXP	0.995	1.078	1.240						

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS	GROUND AND SURFACE
INDIANA	251	4778	1908	3489	9816	INDEPENDENT	-	28	74	M	316 PPM	102 PPM	FLUORIDATED IN 1963		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	NP	MM	NP
LT 1	295	210	7	1
1-4	783	745	19	20
5-9	707	652	13	13
10-14	569	559	11	16
15-19	1638	1817	44	48
20-24	3735	2682	118	70
25-29	1833	1196	65	27
30-34	1832	1127	40	18
35-39	631	676	20	13
40-44	625	646	18	12
45-49	597	642	11	21
50-54	490	581	10	23
55-59	450	511	16	11
60-64	334	447	11	8
65-69	303	362	10	12
70-74	297	303	8	5
75-79	241	281	8	6
80-84	0	0	0	0
85-UP	37	63	2	1
TOTALS	14207	13200	431	325
GRAND TOTAL				28163

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM
TOTAL	215	210	425
CV-RENAL	109	113	222
HEART	76	70	146
NON CV-R	106	97	203
CANCER	39	30	69

1960									
WM	FP	WM	FP	WM	FP	WM	FP	WM	FP
330	300	6	8						
1050	1005	23	22						
1002	983	25	24						
819	812	24	21						
2291	2291	48	49						
3107	2554	97	68						
1545	1545	111	76						
923	830	89	39						
734	807	39	21						
574	555	31	20						
511	640	17	10						
564	636	13	13						
472	567	12	16						
363	541	9	13						
336	467	12	16						
240	389	6	7						
179	278	8	8						
96	153	3	2						
57	95	1	4						
15193	15153	574	437						
			31357						

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

1970	WM	WP	NM	NP
	262	280	16	20
	960	892	39	54
	1073	1015	50	58
	975	933	39	31
	3745	4446	186	231
	5718	5719	238	272
	2037	1651	165	128
	948	918	104	58
	716	639	52	31
	624	696	30	31
	537	678	12	20
	490	612	19	13
	405	524	16	10
	402	571	14	10
	344	493	7	14
	209	393	7	13
	166	309	5	13
	84	206	1	3
	72	134	2	2
	19767	21109	1002	1012
				42890

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	425.0	730.0	830.0
EXPECTED*	405.0	726.7	802.1
OBS/EXP	1.049	1.005	1.035
CV-RENAL			
OBSERVED	222.0	414.0	445.0
EXPECTED*	216.0	393.1	425.8
OBS/EXP	1.028	1.053	1.035
HEART			
OBSERVED	146.0	287.0	281.0
EXPECTED*	152.6	275.8	297.8
OBS/EXP	0.956	1.041	0.944
NON CV-R			
OBSERVED	203.0	316.0	385.0
EXPECTED*	189.1	333.6	372.3
OBS/EXP	1.074	0.947	1.034

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	INDIANA
1950 POP./SQ. MILE	7612	434
1970 POP./SQ. MILE	5106	
1970 POP./SQ. MILE	2991	
1949 MED. FAM. INCOME	1969	
1949 MED. FAM. INCOME	8517	
URBAN CLASS AREA	-	INDEPENDENT
URBAN AREA RANK	-	-
JAN MEAN TEMPERATURE	30	
JULY MEAN TEMPERATURE	76	
MEAN ANNUAL PRECIPITATION	44	
LAND RESOURCE REGION	N	
WATER SOURCE		SURFACE
TOTAL HARDNESS	111 PPM	
NON-CARBONATE HARDNESS	28 PPM	
PRECIPITATION STATUS	NO ARTIFICIAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	NP	NM	NP
TOTALS	23613	20550	5001	5099
GRAND TOTAL				54263
1-4	491	454	139	139
5-9	1759	1586	497	485
10-14	1675	1686	445	495
15-19	1946	1393	404	417
20-24	1335	1408	297	362
25-29	2119	1918	440	513
30-34	2243	2025	489	499
35-39	2056	1956	397	464
40-44	1856	1605	435	497
45-49	1577	1341	370	335
50-54	1441	1122	363	294
55-59	1417	1091	291	212
60-64	1510	1015	197	145
65-69	1299	838	112	68
70-74	761	567	76	80
75-79#	375	263	28	47
80-84#	227	207	19	39
85-UP	26	0	0	8

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	500	569	1069	535	580	520	1635	491	575	532	1598
CV-RURAL	209	272	481	286	282	251	821	260	296	293	849
HEART	164	208	372	212	212	175	599	186	202	181	569
NON CV-R	291	297	588	249	298	269	816	231	279	239	749
NON-CANCER	83	80	163	85	98	82	265	85	95	88	268

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

Cause		1949-50	1959-61	1969-71
TOTAL	OBSERVED	1069.0	1635.0	1598.0
	EXPECTED*	784.2	1444.3	1413.2
	OBS/EXP	1.363	1.132	1.131
CV-RENAL	OBSERVED	481.0	821.0	849.0
	EXPECTED*	373.0	704.5	768.7
	OBS/EXP	1.290	1.165	1.104
HEART	OBSERVED	372.0	599.0	569.0
	EXPECTED*	273.9	506.7	535.2
	OBS/EXP	1.358	1.182	1.063
NON CV-R	OBSERVED	588.0	814.0	749.0
	EXPECTED*	411.2	739.8	644.5
	OBS/EXP	1.430	1.100	1.162
CANCER	OBSERVED	163.0	265.0	268.0
	EXPECTED*	128.1	224.8	216.5
	OBS/EXP	1.272	1.179	1.238

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE RANK BY POPULATION	INDIANA
1950 POP./SQ. MILE	213
1950 POP./SQ. MILE	5218
1970 POP./SQ. MILE	3620
1949 MED. FAM. INCOME	3779
1949 MED. FAM. INCOME	9208
1969 MED. FAM. INCOME	FRANCE
URBAN CLASS	2
1950 URBAN AREA RANK	74
JAN MEAN TEMPERATURE	24
JULY MEAN TEMPERATURE	74
MEAN ANN. PRECIPITATION	32
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	133 PPM
NON-CARBONATE HARDNESS	29 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1966

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NF	NP	WM	WF	NF	NP	WM	WF	NF	NP
IT 1	1361	1331	57	72	1769	1802	251	232	1462	1401	279	239
1-4	5298	5107	263	264	6873	6677	864	867	5445	5284	987	1008
5-9	4921	4778	245	276	7910	7576	853	870	7342	7046	1439	1428
10-14	3792	3756	185	219	6473	6378	599	577	7463	7313	1380	1323
15-19	3621	4041	168	233	4694	5301	393	445	7347	7541	949	1085
20-24	4750	5556	218	283	4444	5009	399	460	7013	7948	776	971
25-29	5538	5819	256	289	4637	4615	435	556	5599	5515	636	730
30-34	4747	5162	224	225	4941	5057	436	476	4017	3931	537	672
35-39	4496	4946	217	225	5013	5357	387	476	3567	3598	476	585
40-44	4385	4859	159	171	4377	4803	309	322	4292	4536	476	574
45-49	4215	4457	161	133	4860	4940	238	250	4939	4897	303	311
50-54	3760	3972	141	129	3847	4278	186	174	3533	4266	264	278
55-59	3259	3512	65	68	3003	3529	133	125	3092	3923	181	202
60-64	2857	2926	65	68	2444	3115	85	96	2500	3416	165	168
65-69	2025	2081	45	40	1735	2429	62	47	1868	2860	95	109
70-74	1357	1804	24	27	1132	1718	25	39	1242	2190	76	72
75-79	1197	1748	25	15	529	921	12	24	681	1378	20	26
80-84	0	0	0	0	262	547	8	11	408	902	27	35
85-UP	186	355	4	7								
TOTALS	61584	66729	2552	2742	71922	77865	5832	6157	75309	82684	9467	10211
GRAND TOTAL				133607				161776				177671

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM	NP	1959	1960	1961	SUM	1970	1971	SUM	NP
TOTAL	1356	1417	2773		1561	1481	1588	4630	1784	1745	5299	
CV-RENAL	705	754	1459		870	847	865	2582	949	945	2832	
HEART	475	525	1000		574	579	558	1711	643	609	1922	
NON CV-R	651	663	1314		691	634	723	2048	835	800	2467	
CANCER	214	230	444		276	243	281	800	358	328	1015	

CITY CHARACTERISTICS

STATE	INDIANA
1950 RANK BY POPULATION	71
1950 POP./SQ. MILE	7107
1970 POP./SQ. MILE	3450
1949 MED. FAM. INCOME	3761
1969 MED. FAM. INCOME	10401
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	87
JAN MEAN TEMPERATURE	26
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	34
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	58 PPM
NON-CARBONATE HARDNESS	58 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1951

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND REPORTING PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*
TOTAL	2773.0	4630.0	5299.0	4612.5	5496.0	5496.0
CV-RENAL	1459.0	2582.9	2832.0	1.154	3141.2	0.565
HEART	1309.2	2522.9	1922.0	1.066	2193.2	0.876
NON CV-R	1314.0	2048.0	2467.0	1.202	2348.8	1.050
CANCER	444.0	800.0	1015.0	1.130	1.101	1.217

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WH	NP	NH	HP
14-19	1023	979	514	505
20-24	4032	3774	1939	1861
25-29	3131	2731	1843	1867
30-34	3131	2957	1522	1491
35-39	2760	2904	1222	1450
40-44	2536	3808	1595	1896
45-49	4276	4392	1841	2062
50-54	4258	4285	1532	1711
55-59	3482	3887	1624	1722
60-64	3482	3177	1396	1434
65-69	3084	2785	1344	1274
70-74	3035	2513	1086	863
75-79	3011	2277	837	609
80-84	2596	1699	471	404
85-89	1490	1226	394	362
90-94	697	633	169	183
95-99	525	506	145	161
TOTALS	48920	45665	19457	19869
GRAND TOTAL				133911

[illegible]

1970	1980	1990
953	948	
3837	4117	
5710	5755	
6126	6502	
5134	5546	
2957	3843	
2588	3244	
2262	2809	
2392	2959	
2663	3107	
2490	2543	
1940	2107	
1649	1617	
1254	1346	
957	1051	
659	690	
342	400	
169	243	
133	165	
44515	49086	
	175415	

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
18-24	1023	979	514	865	1271	1204	1101	1171
25-34	3032	3774	939	1501	5132	4938	4469	4551
35-44	3346	3731	1843	1867	5777	5571	4915	5115
45-54	3136	2957	1822	1491	4921	4793	3623	3553
55-64	2760	2904	1222	1450	3579	3751	2216	2415
65-74	3536	3848	1595	1846	3988	3389	1609	2115
75-84	4271	4392	1841	2062	3365	3301	2005	2595
85-94	4258	4235	1532	1711	3858	3898	2501	2961
95-104	4026	3897	1624	1722	4039	4074	2470	2517
105-114	3482	3177	1396	1383	4113	4004	1962	2074
115-124	3084	2513	1344	1274	3729	3547	1753	1765
125-134	3035	2785	1086	863	3121	2740	1451	1357
135-144	3011	2277	837	644	2636	2401	1265	1116
145-154	2596	1699	471	409	2343	2067	965	813
155-164	1490	1226	362	394	1944	1724	630	633
165-174	697	633	169	183	1413	1258	379	381
175-184	525	506	145	161	705	672	241	221
185-194	0	0	0	0	241	306	84	95
195-204	47	92	15	43	131	145	46	58
TOTALS	48920	45665	19457	19869	55197	53783	33651	35661
GRAND TOTAL				133911				178317

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE
STATE	INDIANA
1950 RANK BY POPULATION	70
1950 POP./SQ. MILE	3219
1970 POP./SQ. MILE	4177
1970 POP./50. MILE	3688
1949 MED. FAM. INCOME	9819
1969 MED. FAM. INCOME	9819
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	2
JULY MEAN TEMPERATURE	24
JAN MEAN TEMPERATURE	74
JULY MEAN PRECIPITATION	32
MEAN AN. PRECIPITATION	L
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	136 PPM
NON-CARBONATE HARDNESS	24 PPM
FLUORIDATION STATUS	FLUORID

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	1047	942	16	17	1408	1376	51	49	931	886	61	65
1-4	4038	3757	51	54	5371	5079	213	222	3572	3272	234	257
5-9	3719	3500	51	57	5885	5550	154	173	5084	4730	342	351
10-14	3026	3027	43	45	5345	4979	105	139	5378	5151	356	402
15-19	2663	2719	35	34	3567	3907	65	88	4673	4929	230	275
20-24	3113	3640	56	61	3306	3761	67	98	4088	4534	145	217
25-29	4002	4216	45	57	3619	3368	95	112	3389	3230	171	179
30-34	3809	3930	55	50	3681	3879	96	104	2668	2624	142	173
35-39	3598	3499	49	40	4102	4178	78	94	2645	2592	111	166
40-44	3160	3026	43	46	3951	4041	72	66	2902	3217	128	115
45-49	2823	2518	42	50	3574	3479	67	59	3398	3656	98	112
50-54	2434	2198	52	20	3053	2807	54	46	3323	3518	98	97
55-59	2253	1870	31	14	2517	2358	48	51	2914	2958	74	84
60-64	1728	1484	10	12	1895	1900	37	15	2172	2155	59	62
65-69	1052	1048	5	7	1525	1494	21	14	1401	1696	48	54
70-74	605	677	9	5	986	1110	3	7	935	1299	30	23
75-79*	515	578	7	5	522	678	4	6	652	923	16	11
80-84*	0	0	0	1	231	340	7	1	323	500	7	8
85-89*	57	125	3	1	108	182	5	0	163	303	10	5
TOTALS	43682	42734	603	575	54646	54466	1242	1344	50611	52473	2360	2646
GRAND TOTAL				87594				111698				107790

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1381.0	2523.0	1.027	1201.0	2456.4	1.027	2718.0	2769.8	0.981
CV-RENAL	707.0	1318.0	1.056	601.2	1248.6	1.056	1502.0	1513.6	0.992
HEART	512.0	942.0	1.063	442.1	911.0	1.063	1116.0	1086.7	1.027
NON CV-R	674.0	1205.0	1.063	593.8	1209.9	1.063	1216.0	1256.2	0.968
CANCER	214.0	430.0	1.066	200.8	404.4	1.066	468.0	456.1	1.026

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	INDIANA	
	STATE	INDIANA
1950 RANK BY POPULATION	128	3727
1950 POP/SQ. MILE	4473	4187
1949 MED. FAM. INCOME	10899	10899
1969 MED. FAM. INCOME	2	2
URBAN CLASS	24	24
1950 URBAN AREA RANK	74	74
JAN MEAN TEMPERATURE	32	32
JULY MEAN TEMPERATURE	M	M
MEAN ANN. PRECIPITATION		
LAND RESOURCE REGION		
WATER SOURCE		
TOTAL HARDNESS		
NON-CARBONATE HARDNESS		
FLUORIDATION STATUS		

FLUORIDATED IN 1953

AGE GROUP	1950				1960			
	WM	WP	NM	NP	WM	WP	NM	NP
	TOTAL	3770	3690	672	741	4606	4468	1508
1-4	14649	14210	2548	2538	17499	16843	5750	5742
5-9	13205	13212	2732	2692	17932	17355	5746	5997
10-14	10643	10572	2265	2311	14883	14994	4229	4200
15-19	9799	11434	1965	2212	11555	13079	2990	3382
20-24	12975	15802	2213	2768	11238	13847	2496	3315
25-29	15648	16534	2578	3106	12491	12622	3009	3754
30-34	13923	14731	2384	2835	12450	12322	3246	3879
35-39	13022	13975	2480	2901	11927	12716	3355	3805
40-44	12264	13610	2207	2521	10855	12083	2760	3175
45-49	11434	12772	2011	2259	10660	11866	2173	2452
50-54	10605	11624	1823	1932	9936	10965	2069	2196
55-59	9723	10735	1632	1732	9133	9758	1750	1958
60-64	7423	10735	1132	1073	7758	9846	1555	1750
65-69	5885	7508	928	1006	6450	8801	1382	1454
70-74	4078	5296	552	509	4541	6051	882	999
75-79	3680	5275	384	497	2905	4677	591	612
80-84	0	0	0	0	1554	2597	267	299
85-UP	545	948	72	123	836	1566	159	228
TOTALS	172674	190408	30570	33521	179150	198424	46908	51776
GRAND TOTAL				472173				476258

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS BY CAUSE AND YEAR										
		49-50		1959		1960		59-61		
		SUM		SUM		SUM		SUM		
49-50										69-71
CAUSE	1949	1950	1959	1960	1961	1969	1970	1971		SUM
TOTAL	5479	5453	5354	5525	5337	5626	6084	6733		19883
HEART	2477	2417	2378	2521	2356	2566	2936	3443		9505
HEART	1898	1814	1960	2002	1955	1978	2151	2372		6897
NON CV-R	2362	2327	2436	2574	2438	2751	2937	3290		8378
CANCER	756	726	799	836	862	998	1171	1310		3479

** SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE
STATE	INDIANA
1950 BANK BY POPULATION	23
1950 POP./SQ. MILE	7739
1970 POP./SQ. MILE	1963
1949 MED. FAM. INCOME	3555
1969 MED. FAM. INCOME	10754
URBAN CLASS	CENTRAL
1950 URBAN AREA BANK	25
JAN MEAN TEMPERATURE	26
JULY MEAN TEMPERATURE	78
MEAN ANNUAL PRECIPITATION	39
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	241 PPM
NON-CARBOANATE HARDNESS	72 PPM
FLUORIDATION STATUS	FLUORIDITY

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	NM	NP
IT-1	445	411	14	58
1-4	1762	1736	52	14
5-9	1742	1634	64	67
10-14	1382	1357	50	53
15-19	1128	1313	47	56
20-24	1434	1555	58	62
25-29	1562	1654	62	60
30-34	1470	1612	44	60
35-39	1266	1275	52	46
40-44	1179	1165	37	45
45-49	1036	1054	52	44
50-54	909	1000	41	48
55-59	877	883	43	26
60-64	726	734	21	20
65-69	540	632	15	26
70-74	378	445	12	12
75-79*	397	515	9	15
80-84*	0	0	0	0
85-90	59	75	3	2
TOTALS	18232	19050	676	714
GRAND TOTAL				38672

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50		59-61		69-71	
	1949	1950	1959	1961	1969	1971
STROKE	10.0	10.0	10.0	10.0	10.0	10.0
HEART DISEASE	10.0	10.0	10.0	10.0	10.0	10.0
DIABETES	10.0	10.0	10.0	10.0	10.0	10.0
CHRONIC BRONCHITIS	10.0	10.0	10.0	10.0	10.0	10.0
ALCOHOLISM	10.0	10.0	10.0	10.0	10.0	10.0
PSYCHIC ILLNESS	10.0	10.0	10.0	10.0	10.0	10.0
OTHER	10.0	10.0	10.0	10.0	10.0	10.0
TOTAL	10.0	10.0	10.0	10.0	10.0	10.0

	422	389	811	435	466	447	1348	522	510	505	1537
TOTAL	422	389	811	435	466	447	1348	522	510	505	1537
CV-RENAL	217	201	418	261	254	255	770	296	282	252	830
HEART	154	124	186	159	186	173	518	198	195	176	569
NON CV-R	205	188	353	174	212	192	578	226	228	253	707
CANCER	69	49	118	61	73	68	202	98	84	89	271

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED EXPECTED* OBS/EXP	811.0 670.7 1.209	1348.0 1267.6 1.063
CV-RENAL	OBSERVED EXPECTED* OBS/EXP	418.0 365.1 1.145	770.0 692.1 1.113
HEART	OBSERVED EXPECTED* OBS/EXP	278.0 260.6 1.067	518.0 488.9 1.060
NON CV-R	OBSERVED EXPECTED* OBS/EXP	333.0 305.7 1.286	578.0 582.4 1.004
CANCER	OBSERVED EXPECTED* OBS/EXP	118.0 107.2 1.101	271.0 208.3 1.301

CITY CHARACTERISTICS	CODE
STATE	INDIANA
1950 BANK BY POPULATION	309
1950 605/SQ. MILE	4785
1970 505/SQ. MILE	4787
1949 MED. FAM. INCOME	3304
1969 MED. FAM. INCOME	9397
URBAN CLASS	INDEPENDENT
1950 URBAN AREA BANK	-
JAN MEAN TEMPERATURE	27
JULY MEAN TEMPERATURE	76
MEAN ANN. PRECIPITATION	38
LAND RESOURCE REGION	M
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	402 PPM
NON-CARBONATE HARDNESS	115 PPM
FLUORIDATED STATUS	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960			1970		
	WM	NP	NP	WM	NP	NP	WM	NP	NP
17-19	302	329	22	324	419	49	320	274	50
20-24	1295	1221	93	1663	1682	198	1165	1156	221
25-29	1110	1146	81	1861	1695	203	1632	1577	341
30-34	930	930	93	1508	1407	164	1657	1617	310
35-39	800	965	70	984	1199	107	1415	1621	237
40-44	912	1249	42	1094	1282	72	1268	1538	178
45-49	1199	1301	59	1171	1115	88	1104	1136	157
50-54	895	1146	51	905	1250	93	960	960	129
55-59	1075	1025	74	1273	1232	92	924	924	112
60-64	891	971	59	1084	1062	84	1073	992	109
65-69	801	830	49	948	924	71	954	1083	105
70-74	734	806	39	734	906	60	992	964	84
75-79	608	670	30	774	763	57	855	897	63
80-84	545	653	26	634	787	44	731	827	55
85-89	460	539	25	493	578	41	544	725	47
90-94	371	443	20	415	555	35	465	600	30
95-99	383	477	14	250	415	15	418	459	20
100-104	0	0	0	166	224	11	223	340	9
105-109	52	95	5	97	174	8	127	317	8
TOTALS	13533	14794	852	17410	17493	1497	17028	18007	2273
GRAND TOTAL			902			1454			2299
			30081			37854			39607

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* * SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS BY CAUSE AND YEAR											CITY CHARACTERISTICS			CODE			
49-50		59-61		1960		1961		1969		1970		1971		69-71		STATE	INDIANA
SUM		SUM												SUM		1950 RANK BY POPULATION	398
1950		1959		1960		1961		1969		1970		1971		1971		1950 POB/SQ. MILE	6016
1949		340		405		392		467		451		382		1300		1970 POB/SQ. HILE	4126
TOTAL		198		225		245		276		198		169		565		1949 MED. FAM. INCOME	2980
CV-RENAL		129		124		171		198		175		135		501		1969 MED. FAM. INCOME	9587
HEPAT		142		180		147		503		63		57		180		URBAN CLASS	INDEPENDENT
NON CV-R		43		59		64		60		63		57		180		1950 URBAN AREA RANK	-
CANCER																JAN MEAN TEMPERATURE	27
																JULY MEAN TEMPERATURE	74
																MEAN ANN. PRECIPITATION	37
																LAND RESOURCE REGION	M
																WATER SOURCE	GROUND
																TOTAL HARDNESS	138 PPM
																NON-CARBONATE HARDNESS	67 PPM
																FLUORIDATION STATUS	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	MM	MF	WM	WF	MM	MF	WM	WF	MM	MF
LT 1	391	391	5	1	357	320	4	3	366	354	6	2
1-4	1518	1449	14	6	1438	1427	22	16	1241	1200	13	7
5-9	1365	1358	6	7	1745	1702	18	17	1589	1511	6	8
10-14	1083	1081	13	8	1557	1478	18	11	1648	1549	15	5
15-19	1002	1115	5	7	1059	1262	11	6	1557	1736	8	13
20-24	1388	1528	6	6	1830	1043	2	8	1352	1679	7	12
25-29	1485	1568	4	2	1018	1040	5	13	1296	1260	15	10
30-34	1274	1259	1	7	1122	1103	4	6	851	879	4	10
35-39	1165	1251	3	6	1104	1219	4	6	837	881	9	6
40-44	1093	1112	3	7	938	1050	2	8	946	1037	3	9
45-49	993	1041	7	1	993	1093	2	2	1033	1169	3	2
50-54	774	733	3	1	886	936	9	5	897	1037	2	3
55-59	762	707	3	3	952	922	2	3	852	979	2	6
60-64	621	603	1	2	518	609	2	3	596	864	1	1
65-69	481	504	3	2	546	631	0	1	596	831	0	1
70-74	319	344	0	0	443	474	0	1	426	450	1	1
75-79	283	328	1	0	247	321	0	0	302	450	3	3
80-84	0	0	0	0	137	173	1	0	149	288	0	2
85-UP	27	70	1	0	85	97	1	0	103	178	2	4
TOTALS	16123	16647	77	66	16065	17086	108	102	16760	18552	98	107
GRAND TOTAL				32913				33361				35517

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 542.0 EXPECTED* 519.8 OBS/EXP 1.043	1001.0 950.1 1.054	1036.0 1147.0 0.903
CV-RENAL	OBSERVED 263.0 EXPECTED* 273.9 OBS/EXP 0.960	577.0 532.2 1.084	557.0 666.2 0.836
HEART	OBSERVED 185.0 EXPECTED* 198.3 OBS/EXP 0.933	386.0 381.4 1.012	385.0 469.7 0.820
MON CV-R	OBSERVED 279.0 EXPECTED* 246.0 OBS/EXP 1.134	424.0 417.9 1.015	479.0 480.8 0.996
CANCER	OBSERVED 96.0 EXPECTED* 85.1 OBS/EXP 1.128	159.0 154.9 1.027	211.0 179.4 1.176

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

INDIANA

CAUSE	1949	1950	1959	1960	1961	59-61 SUM	69-71 SUM
TOTAL	281	261	323	344	334	1001	1036
CV-RENAL	139	124	199	201	177	577	557
HEART	99	86	133	139	114	386	385
MON CV-R	142	137	124	143	157	424	479
CANCER	45	51	53	53	53	159	211

STATE	1950 RANK BY POPULATION	1950 RANK BY POP/SG. MILE	1950 POP/SG. MILE	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANNUAL PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
INDIANA	369	4840	3700	3967	9493	FRINGE	74	24	73	35	L	GROUND	296 PPM	72 PPM	FLUORIDATED IN 1964

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WP	NM	NF	WM	WP	WM	WP	NM	NF	WM	WP
LT 1	548	570	55	69	735	686	80	61	80	61	545	481
1-4	2350	2238	237	207	2773	2694	312	296	312	296	2053	1858
5-9	2253	2113	222	228	3045	2894	379	366	379	366	2343	2269
10-14	1853	1833	154	170	2729	2638	343	327	343	327	2365	2274
15-19	1790	2219	124	153	2592	3154	205	241	205	241	4064	5002
20-24	2465	2669	155	181	2458	2818	137	183	137	183	4288	4796
25-29	2277	2419	160	209	1941	1961	150	181	150	181	2061	1890
30-34	1965	2077	150	188	2045	2003	150	180	150	180	1440	1371
35-39	1921	1951	180	195	1887	2025	161	211	161	211	1161	1323
40-44	1815	1826	146	148	1745	1960	176	179	176	179	1487	1551
45-49	1625	1581	131	146	1798	1800	175	188	175	188	1470	1659
50-54	1312	1406	141	119	1603	1745	141	151	141	151	1409	1584
55-59	1067	1228	110	93	1438	1528	124	121	124	121	1297	1532
60-64	992	1113	65	63	1050	1230	98	92	98	92	1199	1473
65-69	792	996	64	51	849	1147	89	81	86	75	866	1181
70-74	611	706	35	38	681	940	53	54	53	54	586	980
75-79#	553	691	28	16	447	747	30	23	391	739	45	59
80-84#	0	0	0	0	273	390	18	21	254	511	24	30
85-UP	87	127	6	3	140	212	14	11	158	310	20	24
TOTALS	26276	27763	2163	2277	30229	32572	2835	2967	29437	32784	3331	3528
GRAND TOTAL				58479			68603					69060

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	DEATHS AND DEATH RATIOS BY CAUSE AND CENSUS PERIOD						CITY CHARACTERISTICS						CODE
	1949-50	1959-61	1969-71	1949-50	1959-61	1969-71	STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS
TOTAL	1174.0	2144.0	2425.0	1017.8	1936.6	2026.0	INDIANA	200	5848	5397	3335	8752	INDEPENDENT
CV-RENAL	OBSERVED*	1174.0	2144.0	OBS/EXP	1.153	1.107	1950 POP/SQ. MILE						
HEART	OBSERVED	588.0	1137.0	EXPECTED*	549.7	1071.1	1949 MED. FAM. INCOME						
NON CV-R	OBSERVED	588.0	1137.0	EXPECTED*	549.7	1071.1	1969 MED. FAM. INCOME						
CANCER	OBSERVED	588.0	1137.0	EXPECTED*	549.7	1071.1	URBAN CLASS						
	OBS/EXP	1.007	1.001	OBS/EXP	1.070	1.062	1950 URBAN AREA RANK						
							JAN MEAN TEMPERATURE						
							JULY MEAN TEMPERATURE						
							MEAN ANN. PRECIPITATION						
							LAND RESOURCE REGION						
							WATER SOURCE						
							TOTAL HARDNESS						
							NON-CARBONATE HARDNESS						
							FLUORIDATION STATUS						

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
TOTAL	13382	14660	611	693	17196	18941	789	886	17051	19447	888	1016
GRAND TOTAL			29346				37812					38402

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*
TOTAL	706.0	1207.0	1343.0		577.0	1173.3
	1.223	1.029	0.990		1.223	1.029
CV-RENAL	386.0	730.0	745.0		324.2	666.1
	1.191	1.096	0.923		1.191	1.096
HEART	275.0	507.0	522.0		228.8	469.0
	1.202	1.081	0.928		1.202	1.081
NON CV-R	320.0	477.0	598.0		252.8	504.7
	1.266	0.940	1.090		1.266	0.940
CANCER	105.0	160.0	237.0		91.0	208.1
	1.153	0.878	1.139		1.153	0.878

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				59-61	
	1949	1950	49-50	SUR	1959	1960	1961	SUR	1969	1970	1971	69-71	SUR	SUR
TOTAL	355	351	706		406	391	410	1207	461	458	424	1343		
CV-RENAL	190	196	386		242	237	251	730	266	254	225	745		
HEART	138	137	275		166	157	184	507	184	175	163	522		
NON CV-R	165	155	320		164	154	159	477	195	204	199	598		
CANCER	54	51	105		56	55	49	160	68	91	78	237		

CITY CHARACTERISTICS

CODE

STATE	INDIANA	
	1950	1960
POP/50. MILE	5869	5869
POP/50. MILE	3398	3398
POP/50. MILE	3140	3140
1949 MED. FAM. INCOME	9099	9099
1969 MED. FAM. INCOME	PRINGE	PRINGE
URBAN CLASS	27	27
1950 URBAN AREA RANK	34	34
JAN MEAN TEMPERATURE	77	77
JULY MEAN TEMPERATURE	41	41
MEAN ANN. PRECIPITATION	N	N
LAND RESOURCE REGION		
WATER SOURCE		
TOTAL HARDNESS	96 PPM	96 PPM
NON-CARBONATE HARDNESS	42 PPM	42 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1969	FLUORIDATED IN 1969

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960			1970			CAUSE	1949-50	1959-61	1969-71
	WH	WF	NH	WH	WF	NH	WH	WF	NH				
LT 1	1212	1106	139	1236	1167	234	881	879	208	OBSERVED	2178.0	3834.0	4232.0
1-4	4266	4232	403	4920	4801	552	3349	3170	858	EXPECTED*	1978.0	3792.3	4355.9
5-9	3556	3563	357	4189	4308	938	4581	4431	1208	OBS/EXP	1.101	1.011	0.572
10-14	3145	3047	266	5461	5308	679	4897	4699	1248				
15-19	4073	3505	287	3875	3875	430	5106	5106	1092	CV-RENEWAL			
20-24	4265	4666	350	3694	3127	309	4035	4518	639	OBSERVED	1126.0	2125.0	2286.0
25-29	4887	4926	320	3150	3525	312	3303	3259	469	EXPECTED*	1043.4	2075.5	2523.6
30-34	4419	4464	332	4112	4383	401	3235	3231	412	OBS/EXP	1.079	1.024	0.506
35-39	3841	3984	331	4336	4590	480	3168	3669	393				
40-44	3841	3984	331	3837	4158	357	3340	3470	430	HEART			
45-49	3562	3666	253	3802	3965	322	3398	3703	466	OBSERVED	761.0	1411.0	1540.0
50-54	3312	3181	215	3324	3603	285	3069	3490	355	EXPECTED*	753.0	1477.6	1759.6
55-59	2689	2939	115	2954	3294	224	2946	3339	295	OBS/EXP	1.011	0.955	0.875
60-64	2351	2468	102	2642	2736	198	2576	3065	254				
65-69	1812	1912	84	2025	2508	137	1923	2644	203	CV-R			
70-74	1081	1267	32	1558	1950	89	1512	2081	147	NON CV-R			
75-79	960	1143	35	901	1212	53	1015	1627	85	OBSERVED	1052.0	1709.0	1946.0
80-84	0	0	0	406	614	22	581	1018	43	EXPECTED*	934.5	1716.8	1832.4
85-UP	148	201	4	240	392	12	342	607	58	OBS/EXP	1.126	0.995	1.062
TOTALS	53128	54556	4134	57563	61713	6389	50950	56220	8808				
GRAND TOTAL			4093			6780			9602				
			115911			132445			125580				
* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED													
										CANCER			
										OBSERVED	340.0	637.0	772.0
										EXPECTED*	325.5	609.0	669.1
										OBS/EXP	1.046	1.046	1.154

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS					CODE	
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1970	1971	69-71 SUM		
CAUSE	1949	1950		1959	1960	1961		1969	1970		STATE	INDIANA
TOTAL	1048	1130	2178	1269	1300	1265	3834	1397	1358	4232	1950 BANK BY POPULATION	89
CV-RENAL	525	601	1126	730	697	698	2125	736	711	1477	1950 POP./SQ. MILE	5738
HEART	349	412	761	482	470	450	1411	501	469	870	1970 POP./SQ. MILE	4301
NON CV-R	523	528	1052	539	603	567	1709	661	547	1540	1949 MED. FAM. INCOME	4349
CANCER	166	174	340	200	224	213	637	247	269	638	1969 MED. FAM. INCOME	10231
										1906	URBAN CLASS	CENTRAL
										772	1950 URBAN AREA RANK	74
											JAN MEAN TEMPERATURE	24
											JULY MEAN TEMPERATURE	73
											MEAN ANN. PRECIPITATION	35
											LAND RESOURCE REGION	L
											WATER SOURCE	GROUND
											TOTAL HARDNESS	403 PPM
											NON-CARBONATE HARDNESS	134 PPM
											FLUORIDATION STATUS	FLUORID

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	596	551	35	43	640	690	74	48	463	489	49	51
2	2266	2358	137	123	2731	2623	256	237	1790	1678	196	183
3-9	2178	2012	130	128	2984	2845	236	213	2421	2360	270	266
10-14	1644	1673	141	137	2788	2909	162	179	2553	2529	318	283
15-19	1593	1979	121	120	2277	2644	131	145	3877	4072	339	331
20-24	2235	2556	94	124	2069	2308	115	153	4264	4039	193	268
25-29	2416	2577	101	145	1608	1702	91	98	1710	1692	120	177
30-34	2135	2300	109	138	1792	2028	85	108	1308	1328	100	177
35-39	1966	2180	112	138	2160	2343	92	144	1122	1296	86	100
40-44	1819	2160	128	139	2015	2392	98	125	1408	1659	82	119
45-49	1804	2015	96	116	1952	2248	101	133	1734	2011	83	137
50-54	1718	1919	112	128	1740	2099	113	146	1580	2023	96	122
55-59	1606	1871	126	108	1807	2097	97	112	1592	1931	81	106
60-64	1504	1723	96	88	1503	1879	87	98	1281	1872	97	115
65-69	1275	1588	79	65	1441	1834	113	104	1180	1731	80	120
70-74	918	1058	43	51	1096	1553	63	71	999	1561	72	77
75-79	977	1164	45	36	823	1116	41	52	717	1232	61	64
80-84	0	0	0	0	419	592	21	23	387	792	28	41
85-UP	117	215	5	14	210	356	8	14	262	503	21	31
TOTALS	28757	31899	1710	1848	32055	36258	1984	2203	30458	34798	2372	2658
TOTAL TOTAL				64214				72500				70286

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	48-50	1959	1960	1961	59-61	1969	1970	1971	69-71
			SUR			SUR				SUR	
TOTAL	918	930	1848	1055	1043	1042	3150	1012	927	951	2890
CV-RENTAL	477	522	999	623	615	602	1884	604	530	543	1677
HEAT	300	363	663	418	430	420	1268	429	367	379	1175
CV-R	441	408	849	442	428	436	1306	408	397	408	1213
NON CV-R	127	127	256	151	152	164	467	158	145	165	468

CITY CHARACTERISTICS

STATE	1950	1950 RANK BY POPULATION	INDIANA
	1950	185	185
	1950 POP./SQ. MILE	5263	5263
	1970 POP./SQ. MILE	2693	2693
	1949 MED. FAM. INCOME	3118	3118
	1969 MED. FAM. INCOME	8679	8679
URBAN CLASS			CENTRAL
1950 URBAN AREA RANK		144	144
JAN MEAN TEMPERATURE		28	28
JULY MEAN TEMPERATURE		79	79
MEAN ANNUAL PRECIPITATION		38	38
LAND RESOURCE REGION		M	M
WATER SOURCE		SURFACE	SURFACE
TOTAL HARDNESS		208 PPM	208 PPM
NON-CARBONATE HARDNESS		98 PPM	98 PPM
FLUORIDATION STATUS		NO ARTIFICIAL	NO ARTIFICIAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	300	285	3	4	317	332	5	8	248	265	14	12
1-4	1238	1170	11	11	1400	1276	18	17	1081	971	51	47
5-9	1217	1147	15	25	1589	1501	29	28	1501	1521	61	62
10-14	927	889	19	11	1405	1406	16	25	1466	1448	46	54
15-19	849	990	6	10	992	1168	10	21	1309	1412	41	44
20-24	1254	1254	10	12	696	966	13	14	910	1342	32	44
25-29	1195	1242	18	25	835	937	16	20	960	979	32	31
30-34	1004	1088	14	16	958	1055	21	17	725	759	27	26
35-39	991	1082	13	11	1053	1094	15	12	798	800	19	23
40-44	941	1002	11	14	891	966	11	12	706	911	24	17
45-49	864	977	22	15	848	928	18	15	946	992	15	22
50-54	965	1027	12	14	823	940	15	17	809	889	8	17
55-59	838	901	7	9	767	900	20	17	688	841	17	21
60-64	685	783	13	9	768	926	14	11	657	890	15	13
65-69	542	677	7	4	661	808	6	9	539	771	13	17
70-74	401	519	6	4	468	697	6	11	494	757	9	4
75-79	413	612	6	3	309	448	4	3	364	614	8	2
80-84	0	0	0	0	155	299	1	1	201	400	5	5
85-89	86	169	0	0	98	203	0	2	132	282	8	3
TOTALS	14408	15814	193	198	15033	16890	241	266	14613	16844	445	464
GRAND TOTAL				30613				32430				32366

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	743.0	1057.0	1165.0
EXPECTED*	698.1	1168.4	1315.5
OBS/EXP	1.064	0.905	0.886
CV-RENAL			
OBSERVED	455.0	634.0	711.0
EXPECTED*	408.3	690.6	807.1
OBS/EXP	1.114	0.918	0.881
HEART			
OBSERVED	278.0	452.0	518.0
EXPECTED*	267.8	485.7	556.6
OBS/EXP	0.966	0.931	0.927
NON CV-R			
OBSERVED	288.0	423.0	454.0
EXPECTED*	289.9	477.9	508.4
OBS/EXP	0.993	0.885	0.893
CANCER			
OBSERVED	94.0	170.0	192.0
EXPECTED*	109.4	182.2	195.1
OBS/EXP	0.859	0.933	0.984

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	368	375	743	369	352	336	1057	402	388	375	1165
CV-RENAL	229	226	455	227	217	190	634	244	236	221	711
HEART	126	152	278	166	144	142	452	177	162	179	518
NON CV-R	139	109	288	142	135	146	423	158	152	148	454
CANCER	48	46	94	51	54	65	170	61	63	68	192

CITY CHARACTERISTICS

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1-1	735	714	12	8	1097	1027	25	21	1082	972	36	26
1-4	3001	2770	29	33	4276	3975	56	70	4056	3971	136	119
5-9	2689	2466	30	23	3659	3457	93	102	3550	3497	163	139
10-14	2086	2167	31	19	3869	3659	46	50	3425	3174	126	110
15-19	1869	2347	20	29	2749	3302	38	40	3458	3282	113	132
20-24	2350	2975	33	46	2629	3506	51	46	3851	3474	81	107
25-29	2985	3027	32	28	2966	2976	40	55	3902	4056	75	72
30-34	2714	2780	33	28	3071	3068	48	56	3242	3312	66	72
35-39	2512	2641	23	36	3175	3185	44	47	2941	2942	60	72
40-44	2319	2529	20	20	2776	2839	33	28	3070	3038	54	91
45-49	2309	2436	22	21	2514	2698	24	32	3063	3160	30	38
50-54	2054	2260	21	19	2237	2442	18	30	2689	2786	23	32
55-59	1975	2150	25	17	2087	2237	27	12	2381	2583	22	36
60-64	1719	1852	26	18	1700	2031	23	17	1982	2353	25	36
65-69	1233	1527	16	13	1302	1546	23	23	1352	1923	23	27
70-74	845	1141	12	4	1066	1670	9	14	1066	1670	9	19
75-79*	805	1126	7	7	739	1101	4	7	753	1372	9	13
80-84*	136	223	0	0	365	638	7	8	459	865	2	6
85-UP	136	223	2	4	215	401	3	4	261	648	4	7
TOTALS	34376	37131	394	395	43721	47038	604	672	51502	56925	1087	1128
GRAND TOTAL				72296				92035				110642

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1440.0	2509.0	0.574		1445.1	2789.2	0.518		1440.0	2930.0	0.491	
CV-RENAL	790.0	1376.0	0.574		812.4	1584.1	0.513		790.0	1583.0	0.500	
HEART	513.0	915.0	0.560		581.2	1120.5	0.519		513.0	1112.0	0.461	
NON CV-R	650.0	1133.0	0.574		632.7	1205.1	0.525		650.0	1347.0	0.483	
CANCER	244.0	470.0	0.519		236.6	435.2	0.544		244.0	516.0	0.473	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	IOWA		
1950 RANK BY POPULATION	1634		
1950 POP/SQ. MILE	2346		
1970 POP/SQ. MILE	3682		
1969 MED. F.A.H. INCOME	3689		
1969 MED. F.A.H. INCOME	10900		
URBAN CLASS.	CENTRAL		
1950 URBAN AREA RANK	143		
JAN MEAN TEMPERATURE	20		
JULY MEAN TEMPERATURE	75		
MEAN ANN. PRECIPITATION	30		
LAND RESOURCE REGION	M		
GROUND AND SURFACE			
WATER SOURCE	99 PEM		
TOTAL HARDNESS	63 PEM		
NON-CARBONATE HARDNESS	63 PEM		
FLUORIDATION STATUS	FLUORIDATED IN 1952		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	NM	NP
LT 1	298	263	1	4
1-4	1262	1179	8	10
5-9	1219	1222	12	18
10-14	1015	1041	13	19
15-19	821	1070	6	9
20-24	813	1077	5	9
25-29	1059	1129	7	7
30-34	1048	1107	8	8
35-39	1042	1132	11	5
40-44	948	993	5	7
45-49	950	964	8	6
50-54	962	940	11	6
55-59	1017	877	9	4
60-64	817	742	8	4
65-69	549	650	2	4
70-74	401	424	5	6
75-79	400	523	5	1
80-84	0	0	0	0
85-89	61	104	0	1
TOTALS	14712	15437	119	111
GRAND TOTAL				30379

1960				
WM	WP	NM	NP	
345	359	7	7	
1447	1443	15	18	
1687	1638	18	17	
1514	1472	13	21	
1056	1244	15	17	
687	896	11	11	
856	903	8	12	
932	1019	7	12	
1031	1114	11	14	
1036	1056	9	9	
1025	1031	14	8	
897	966	15	6	
891	891	8	10	
887	815	18	5	
787	793	5	5	
560	627	7	4	
304	437	1	3	
139	213	3	1	
88	139	1	0	
16169	17056	184	180	
			33569	

1970	RP	RP	RM	NP
354	17881	235	249	34719
106	13	4	5	
106	13	4	5	
325	191	1	1	
325	191	1	1	
554	354	1	1	
663	428	0	3	
770	565	5	3	
838	740	5	3	
947	875	11	5	
947	875	11	5	
1036	974	9	8	
1036	974	9	8	
960	960	13	13	
960	960	13	13	
827	876	12	15	
827	876	12	15	
842	858	9	15	
842	858	9	15	
1044	1042	31	20	
1044	1042	31	20	
1313	1318	18	27	
1313	1318	18	27	
1650	1627	19	28	
1650	1627	19	28	
1803	1762	26	35	
1803	1762	26	35	
1591	1590	24	35	
1591	1590	24	35	
1104	1068	28	45	
1104	1068	28	45	
285	285	5	25	

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	748.0	1146.0	1206.0
EXPECTED*	644.6	1131.9	1198.1
OBS/EXP	1.160	1.012	1.007
CV-RENAL			
OBSERVED	435.0	641.0	664.0
EXPECTED*	359.0	652.1	711.2
OBS/EXP	1.179	0.983	0.934
HEART			
OBSERVED	289.0	438.0	448.0
EXPECTED*	264.3	466.2	499.5
OBS/EXP	1.094	0.940	0.897
NON CV-R			
OBSERVED	313.0	505.0	542.0
EXPECTED*	275.5	479.7	487.0
OBS/EXP	1.136	1.053	1.113
CANCER			
OBSERVED	119.0	199.0	210.0
EXPECTED*	105.0	182.8	185.9
OBS/EXP	1.134	1.089	1.129

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR										
	1949	1950	49-50 SUN	1959	1960	1961	59-61 SUN	1969	1970	1971	69-71 SUN
TOTAL	381	367	748	386	397	363	1146	380	387	439	1206
CV-RENAL	219	216	435	208	224	209	641	214	195	255	666
HEART	152	137	289	139	153	146	438	137	132	179	448
NON CV-R	62	151	313	178	173	154	505	166	192	184	542
CANCER	63	56	119	77	68	54	199	53	52	85	210

CITY CHARACTERISTICS		CODE
STATE	IOWA	
1950 BANK BY POPULATION	393	
1950 POP/SQ. MILE	3164	
1970 POP/SQ. MILE	1069	
1949 MED. FAM. INCOME	3417	
1969 MED. FAM. INCOME	9975	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	23	
JULY MEAN TEMPERATURE	75	
MEAN ANN. PRECIPITATION	34	
LAND RESOURCE REGION	M	
WATER SOURCE	GROUND	
TOTAL HARDNESS	271 PPM	
NON-CARBONATE HARDNESS	8 PPM	
FLUORIDATION STATUS	FLUORIDATED	IN 1965

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	1950			1960			1960			1960			1970			1970		
	WM	WF	NF	WM	WF	NF	WM	WF	NF	WM	WF	NF	WM	WF	NF	WM	WF	NF
1-4	517	491	8	717	748	11	3	567	521	4	10	2233	2134	26	35	3321	3277	63
5-9	1989	1893	28	2865	2806	23	38	3321	3277	63	50	3321	3277	63	50	3321	3277	63
10-14	1798	1802	27	3059	2968	27	45	3321	3277	63	50	3321	3277	63	50	3321	3277	63
15-19	1523	1556	30	2593	2510	39	33	1683	1666	18	13	1683	1666	18	13	1683	1666	18
20-24	1435	1688	18	1435	1688	18	13	1427	1423	10	13	1427	1423	10	13	1427	1423	10
25-29	1612	1943	19	1612	1943	19	23	1427	1423	10	13	1427	1423	10	13	1427	1423	10
30-34	1765	1839	20	1765	1839	20	15	1427	1423	10	13	1427	1423	10	13	1427	1423	10
35-39	1387	1546	15	1387	1546	15	15	1427	1423	10	13	1427	1423	10	13	1427	1423	10
40-44	1373	1538	15	1373	1538	15	15	1427	1423	10	13	1427	1423	10	13	1427	1423	10
45-49	1247	1392	17	1247	1392	17	18	1427	1423	10	13	1427	1423	10	13	1427	1423	10
50-54	1344	1437	16	1344	1437	16	18	1427	1423	10	13	1427	1423	10	13	1427	1423	10
55-59	1338	1337	28	1105	1348	13	22	1031	1268	14	25	1031	1268	14	25	1031	1268	14
60-64	1037	1076	19	1130	1256	11	19	857	1177	7	12	857	1177	7	12	857	1177	7
65-69	801	865	12	950	1187	22	18	720	1046	9	14	720	1046	9	14	720	1046	9
70-74	548	670	7	716	865	13	14	482	827	4	9	482	827	4	9	482	827	4
75-79	562	753	14	455	538	5	5	270	463	6	7	270	463	6	7	270	463	6
80-84	0	0	0	215	332	6	7	175	295	3	10	175	295	3	10	175	295	3
85-up	99	137	1	122	207	3	0	28412	31159	331	446	28412	31159	331	446	28412	31159	331
TOTALS	21509	23283	327	26500	28515	278	348	28412	31159	331	446	28412	31159	331	446	28412	31159	331
GRAND TOTAL							55641											

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED EXPECTED* OBS/EXP	987.0 1782.0 1.782	1748.0 1748.0 1.000
CV-RENAL	OBSERVED EXPECTED* OBS/EXP	577.0 1054.0 1.844	923.0 923.0 1.000
HEART	OBSERVED EXPECTED* OBS/EXP	369.0 738.0 2.000	698.0 698.0 1.000
NON CV-R	OBSERVED EXPECTED* OBS/EXP	410.0 728.0 1.776	825.0 825.0 1.000
CANCER	OBSERVED EXPECTED* OBS/EXP	132.0 256.0 1.939	317.0 317.0 1.000

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	IOWA
1950 RANK BY POPULATION	26269
1950 POP/50. MILE	2589
1950 POP/50. MILE	1891
1949 MED. FARM. INCOME	3061
1969 MED. FARM. INCOME	3264
URBAN CLASS AREA RANK	FRINGE
1950 URBAN AREA RANK	41
JAN MEAN TEMPERATURE	23
JULY MEAN TEMPERATURE	78
MEAN ANN. PRECIPITATION	25
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	262 PPM
NON-CARBONATE HARDNESS	88 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1962

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	1613.0	2748.0	2944.0
EXPECTED*	1462.5	2775.0	3190.7
OBS/EXP	1.088	0.990	0.923
CV-RENAL			
OBSERVED	864.0	1607.0	1643.0
EXPECTED*	830.7	1575.4	1866.3
OBS/EXP	1.040	1.020	0.880
HEART			
OBSERVED	587.0	1108.0	1159.0
EXPECTED*	594.5	1116.3	1302.9
OBS/EXP	0.987	0.993	0.890
NON CV-R			
OBSERVED	749.0	1141.0	1301.0
EXPECTED*	651.7	1199.6	1324.4
OBS/EXP	1.149	0.951	0.982
CANCER			
OBSERVED	251.0	437.0	518.0
EXPECTED*	241.5	434.1	478.4
OBS/EXP	1.039	1.007	1.083

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE
STATE	IOWA
1950 BANK BY POPULATION	152
1950 POP/50. MILE	4119
1970 POP/50. MILE	1666
1969 MED. FAM. INCOME	3710
1969 MED. FAM. INCOME	10618
URBAN CLASS	CENTER
1950 URBAN AREA RANK	63
JAN MEAN TEMPERATURE	24
JULY MEAN TEMPERATURE	77
MEAN ANNUAL PRECIPITATION	34
LAND RESOURCE REGION	N
WATER SOURCE	SURFACE
TOTAL HARDNESS	128 PPM
NON-CARBONATE HARDNESS	61 PPM
FLUORIDATION STATUS	FLUORID

NON-CARBONATE HARDNESS	61 PPM	FLUORIDATED IN 1952
FLUORIDATION STATUS		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT-1	1731	1652	96	103	2363	2218	151	161	1725	1601	158	149
1-4	6663	6325	390	428	8755	8556	586	581	6119	5999	537	497
5-9	6298	6244	384	356	9893	9474	652	661	8506	8085	785	693
10-14	5568	5304	320	295	8328	8120	511	547	8726	8419	738	767
15-19	4805	5954	247	325	6293	8030	363	412	8377	9239	663	663
20-24	6529	7758	303	369	5985	7821	294	353	7492	9519	476	586
25-29	6952	7581	315	346	6011	6393	279	399	6233	6643	343	379
30-34	6037	6794	273	308	6402	6506	302	352	4851	5037	318	386
35-39	5668	6566	285	316	6437	6941	315	360	4428	4785	283	411
40-44	5469	6076	236	251	5799	6379	264	311	5106	5400	300	317
45-49	4975	5830	230	238	5379	6216	240	306	5245	5803	296	342
50-54	4797	5371	238	235	4962	5615	226	239	4876	5603	263	292
55-59	4433	4837	197	199	4474	5369	239	219	4363	5330	206	242
60-64	3516	3993	160	149	3987	4730	171	208	3843	4836	181	206
65-69	2901	3436	126	140	3393	4287	170	182	2864	4276	151	164
70-74	1827	2450	84	75	2476	3318	111	117	2272	3577	134	154
75-79#	0	0	0	0	1580	2376	74	80	1554	2827	62	108
80-84#	0	0	0	0	809	1839	26	35	891	1832	45	54
85-UP	308	589	20	15	424	886	25	36	546	1351	27	57
TOTALS	80426	89319	3984	4236	93750	104674	4999	5559	88017	100162	5941	6467
GRAND TOTAL				177965				208982				200587

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	3726.0	3450.4	1.080		6454.0	6420.8	1.005		6557.0	6812.0	0.963	
CV-RENAL												
OBSERVED	1958.0	1924.5	1.017		3583.0	3625.2	0.988		3631.0	4016.3	0.904	
HEART												
OBSERVED	1360.0	1367.2	0.995		2376.0	2556.8	0.929		2622.0	2792.0	0.939	
NON CV-R												
OBSERVED	1768.0	1525.6	1.159		2871.0	2795.7	1.027		2926.0	2795.8	1.047	
CANCER												
OBSERVED	624.0	555.2	1.124		1069.0	1029.4	1.065		1120.0	1088		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	1812	1914	3726		2148	2185	2121	6454	2202	2230	2125	6557
CV-RENAL	924	1034	1958		1229	1201	1153	3583	1213	1248	1170	3631
HEART	668	692	1360		788	795	793	2376	880	906	836	2622
NON CV-R	888	880	1768		919	984	968	2871	982	955	955	2926
CANCER	294	330	624		349	356	364	1069	359	385	376	1120

CITY CHARACTERISTICS

STATE	IOWA	
	1950 RANK BY POPULATION	1950 RANK BY POP/1000
1950 POP/1000	53	3242
1970 POP/1000	3174	3174
1949 MED. FAM. INCOME	3720	3720
1969 MED. FAM. INCOME	10239	10239
URBAN CLASS	CENTRAL	
1950 URBAN AREA RANK	61	
JAN MEAN TEMPERATURE	22	
JULY MEAN TEMPERATURE	76	
MEAN ANN. PRECIPITATION	30	
LAND RESOURCE REGION	H	
WATER SOURCE	GROUND AND SURFACE	
TOTAL HARDNESS	78 PPM	
NON-CARBONATE HARDNESS	31 PPM	
FLUORIDATION STATUS	FLUORIDATED IN 1959	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960			1970		
	WM	WM	NP	WM	WM	NP	WM	WM	NP
IT 1	589	2	1	743	3	1	605	2	5
1	1937	1959	4	2763	10	7	2366	6	14
5-9	1905	2	2	2948	13	6	3494	8	15
10-14	1671	1578	2	2346	9	4	3472	5	6
15-19	1890	2043	3	2265	2476	3	3122	2722	15
20-24	2324	2289	3	1995	2091	12	2467	2743	23
25-29	1958	1843	3	1587	1526	9	1725	1815	5
30-34	1707	1814	3	1662	1636	9	1568	1494	5
35-39	1595	1689	4	1667	1714	6	1472	1583	7
40-44	1450	1559	4	1523	1669	2	1563	1604	5
45-49	1336	1533	6	1471	1558	4	1542	1647	7
50-54	1188	1424	0	1250	1443	2	1380	1565	1
55-59	1125	1352	0	1159	1467	0	1237	1462	1
60-64	1006	1184	2	939	1228	1	1016	1400	2
65-69	829	1042	2	874	1243	1	820	1339	2
70-74	594	834	1	672	1047	0	608	1152	0
75-79#	603	950	1	502	828	1	455	925	0
80-84#	0	0	0	272	515	0	313	643	0
85-89	106	184	1	160	375	0	185	520	0
TOTALS	23859	25737	45	26798	29665	75	29410	32682	111
GRAND TOTAL			30			68			62309
			49671			56606			

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE		1949-50	1959-61	1969-71
TOTAL				
OBSERVED	1220.0	1891.0	1917.0	
EXPECTED*	1044.7	1878.3	2055.0	
OBS/EXP	1.202	1.007	0.933	
CV-RENAL				
OBSERVED	680.0	1038.0	1071.0	
EXPECTED*	577.3	1097.0	1234.3	
OBS/EXP	1.178	0.946	0.668	
HEART				
OBSERVED	482.0	624.0	770.0	
EXPECTED*	408.5	765.4	853.5	
OBS/EXP	1.180	0.815	0.902	
NON CV-R				
OBSERVED	540.0	853.0	846.0	
EXPECTED*	437.5	781.3	820.7	
OBS/EXP	1.234	1.092	1.031	
CANCER				
OBSERVED	167.0	341.0	368.0	
EXPECTED*	159.5	280.2	301.2	
OBS/EXP	1.172	1.217	1.222	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
Y CAUSE AND YEAR

CAUSE	1949	1950	49-50 50H	1959	1960	1961	59-61 50H	1969	1970	1971	69-71 50H	STATE	TOWA
TOTAL	577	603	1220	604	627	560	1891	599	692	626	1917	1950 POP/50. MILE	235
CV-SERIAL	236	304	680	337	353	348	1038	403	402	366	1071	1950 POP/50. MILE	5017
HEAT-C-R	230	252	492	193	218	217	624	209	294	267	770	1970 POP/50. MILE	3799
NON-CV-R	201	259	500	267	274	312	863	295	289	252	846	1949 MED. FIN. INCOME	3636
CANCER	78	109	187	111	89	141	341	131	118	119	368	1969 MED. FIN. INCOME	10454
												URBAN CLASS	INDEPENDENT
												1950 URBAN AREA RANK	-
												JAN MEAN TEMPERATURE	19
												JULY MEAN TEMPERATURE	73
												MEAN ANN. PRECIPITATION	32
												LAND RESOURCE REGION	M
												WATER SOURCE	GROUND
												TOTAL HARDNESS	282 PPM
												NON-CARBONATE HARDNESS	18 PPM
												FLUORINATION STATUS	FLUORIDATED

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
1-4	291	279	6	0	348	349	10	7	229	217	10	9
5-9	1044	1030	11	8	1310	1211	21	22	1002	1003	49	55
10-14	985	942	14	8	1569	1479	21	18	1480	1577	41	58
15-19	872	826	9	14	1296	1250	16	18	1535	1526	51	46
20-24	755	897	14	12	818	1000	16	14	1605	1590	39	32
25-29	856	1071	22	19	660	839	6	6	880	1119	13	22
30-34	948	997	19	8	757	869	7	13	845	942	21	29
35-39	862	970	8	6	900	871	12	12	710	746	19	19
40-44	847	875	8	10	883	925	11	6	700	786	15	19
45-49	779	776	13	5	795	869	8	8	820	863	19	17
50-54	686	817	11	7	736	811	4	8	853	945	14	12
55-59	723	779	10	9	670	732	3	5	788	906	6	10
60-64	624	684	7	7	583	736	7	6	712	777	14	9
65-69	552	559	1	3	550	722	3	9	582	753	2	10
70-74	450	529	5	4	497	569	5	4	436	649	3	5
75-79*	325	367	1	3	420	421	2	2	390	525	3	3
80-84*	323	356	2	2	269	390	0	2	177	406	0	2
85-UP	55	78	0	0	77	201	1	1	143	360	0	2
TOTALS	11977	12852	161	125	13276	14815	156	152	14205	16367	326	365
GRAND TOTAL				25115				28399				31263

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	501.0	508.5	0.985		988.0	1015.2	0.973		1000.0	1245.3	0.803	
CV-RENAL	248.0	286.3	0.866		539.0	598.8	0.900		545.0	774.1	0.704	
HEART	175.0	204.2	0.857		375.0	418.2	0.897		368.0	539.2	0.683	
NON CV-R	253.0	222.2	1.139		449.0	416.4	1.078		455.0	471.2	0.966	
CANCER	74.0	81.4	0.909		109.0	152.7	0.714		193.0	178.1	1.084	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	1959	1961	1969	1971	1971	STATE
TOTAL	239	262	320	314	372	305	323	IOWA
CV-RENAL	120	128	186	193	208	153	184	1950 RANK BY POPULATION 480
HEART	86	89	132	135	147	96	125	1950 POP/SQ. MILE 4739
NON CV-R	119	134	134	161	167	147	139	1970 POP/SQ. MILE 2156
CANCER	33	41	44	49	73	60	60	1949 MED. FAM. INCOME 3540
								1969 MED. FAM. INCOME 9549
								URBAN CLASS INDEPENDENT
								1950 URBAN AREA RANK 7
								JAN MEAN TEMPERATURE 77
								JULY MEAN TEMPERATURE 74
								MEAN ANNUAL PRECIPITATION 31
								WATER RESOURCES REGION N
								TOTAL HARDNESS 456 PPM
								NON-CARBONATE HARDNESS 120 PPM
								FLUORIDATION STATUS NO ARTIFICIAL, OPTIMUM NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	1950			1960			1960			1970			1970			1970		
	WM	WF	NP	WM	WF	NP	WM	WF	NP	WM	WF	NP	WM	WF	NP	WM	WF	NP
LT 1	319	237	4	401	433	8	451	437	12	461	437	13	451	437	12	461	437	13
1-4	367	640	6	1401	1309	19	1496	1400	46	1496	1400	52	1496	1400	46	1496	1400	52
5-9	463	505	3	1278	1244	13	1659	1559	35	1659	1559	29	1659	1559	35	1659	1559	29
10-14	463	505	6	1278	1244	13	1659	1559	35	1659	1559	29	1659	1559	35	1659	1559	29
15-19	1305	1262	5	1705	2009	27	1705	2009	15	1705	2009	15	1705	2009	15	1705	2009	15
20-24	3702	2468	18	3202	2075	16	3042	3330	51	3042	3330	51	3042	3330	51	3042	3330	51
25-29	2073	1412	63	1807	1406	61	2398	2013	102	2398	2013	102	2398	2013	102	2398	2013	102
30-34	842	776	21	1019	923	38	1273	1193	89	1273	1193	89	1273	1193	89	1273	1193	89
35-39	624	636	7	734	718	19	921	890	44	921	890	44	921	890	44	921	890	44
40-44	569	644	4	640	698	14	802	860	24	802	860	24	802	860	24	802	860	24
45-49	519	611	4	569	688	4	752	742	9	752	742	9	752	742	9	752	742	9
50-54	466	580	3	483	622	4	618	742	17	618	742	17	618	742	17	618	742	17
55-59	404	568	2	483	622	4	550	673	7	550	673	7	550	673	7	550	673	7
60-64	347	493	0	456	583	3	500	673	3	500	673	3	500	673	3	500	673	3
65-69	338	415	0	391	526	3	387	597	5	387	597	5	387	597	5	387	597	5
70-74	236	331	1	298	444	2	284	515	2	284	515	2	284	515	2	284	515	2
75-79	269	407	1	195	299	2	188	401	1	188	401	1	188	401	1	188	401	1
80-84	0	0	0	127	195	0	127	272	0	127	272	0	127	272	0	127	272	0
85-89	38	95	0	66	145	0	80	209	0	80	209	0	80	209	0	80	209	0
TOTALS	14077	12880	181	16399	16557	298	22196	23614	466	22196	23614	466	22196	23614	466	22196	23614	466
GRAND TOTAL			74			33443			574			574			574			574
			27212						46850			46850			46850			46850

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*
CV-RENAL									
OBS/EXP		230.0	385.0		230.0	385.0		230.0	385.0
HEART									
OBS/EXP		135.0	271.0		135.0	271.0		135.0	271.0
NON CV-R									
OBS/EXP		198.0	329.0		198.0	329.0		198.0	329.0
CANCER									
OBS/EXP		201.2	380.8		201.2	380.8		201.2	380.8
		0.984	0.864		0.984	0.864		0.984	0.864
		85.0	124.0		85.0	124.0		85.0	124.0
		66.7	122.8		66.7	122.8		66.7	122.8
		1.275	1.010		1.275	1.010		1.275	1.010

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	IOWA	
TOTAL	198	230	259	234	221	714	242	228	242	712	STATE	4859
CV-RENAL	106	124	125	136	124	385	104	101	117	322	1950 POP/50. MILE	4225
HEART	61	74	89	102	80	271	73	73	82	228	1970 POP/50. MILE	3245
NON CV-R	32	106	134	98	97	329	138	127	125	390	1949 MED. FAR. INCOME	8942
CANCER	38	47	55	31	36	124	43	42	56	141	1949 MED. FAR. INCOME	8942
											URBAN CLASS.	INDEPENDENT
											1950 URBAN AREA RANK	-
											JAN. MEAN TEMPERATURE	20
											JULY MEAN TEMPERATURE	75
											MEAN ANN. PRECIPITATION	34
											LAND RESOURCE REGION	M
											WATER SOURCE	GROUND AND SURFACE
											TOTAL HARDNESS	238 PPM
											NON-CARBONATE HARDNESS	114 PPM
											FLUORIDATION STATUS	FLUORIDATED IN 1953

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	WF
LT 1	268	288	4	2	349	324	4	4	3	3	247	210	3	6	6			
1-4	1148	1078	8	12	1432	1368	15	10	13	10	898	854	14	19	14			
5-9	1077	1039	11	23	1697	1652	26	13	13	20	1449	1343	10	20	20			
10-14	979	993	12	14	1375	1323	17	12	17	12	1572	1502	12	17	17			
15-19	859	1126	13	11	913	1133	8	15	15	16	1623	1685	21	18	18			
20-24	976	1178	13	13	693	965	3	3	3	9	872	1199	9	12	12			
25-29	1035	1123	9	7	799	919	2	3	10	10	781	836	10	10	10			
30-34	950	1044	7	4	985	1053	7	12	7	12	726	784	13	10	10			
35-39	930	978	11	10	981	967	6	7	6	6	703	784	10	7	6			
40-44	881	972	4	8	856	941	9	11	9	11	906	914	9	9	11			
45-49	790	889	18	9	790	878	7	6	9	9	868	931	5	9	9			
50-54	780	817	7	18	736	850	6	8	8	8	790	910	5	9	9			
55-59	775	758	14	11	661	783	13	5	6	6	658	840	7	6	6			
60-64	663	644	10	3	596	723	9	7	7	7	623	761	3	7	7			
65-69	475	539	7	9	617	666	10	8	8	8	484	707	6	6	3			
70-74	361	388	2	4	444	561	7	8	8	8	394	617	7	7	8			
75-79	322	413	2	4	271	384	2	3	3	4	328	473	5	4	4			
80-84	0	0	0	0	165	238	2	1	1	4	173	324	4	4	4			
85-89	61	69	3	0	116	168	1	1	1	3	106	231	2	3	3			
TOTALS	13330	14336	155	159	14476	15876	154	136	153	182	14201	15955	153	182	182			
GRAND TOTAL				27980				30642		30491					30491			

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 526.0 EXPECTED* 546.0 OBS/EXP 0.963	904.0 1045.9 0.864	1080.0 1116.1 0.968
CV-RENAL	OBSERVED 314.0 EXPECTED* 306.5 OBS/EXP 1.024	504.0 613.1 0.822	600.0 676.3 0.887
HEART	OBSERVED 210.0 EXPECTED* 219.6 OBS/EXP 0.956	348.0 430.7 0.808	399.0 470.6 0.848
NON CV-R	OBSERVED 212.0 EXPECTED* 239.5 OBS/EXP 0.885	400.0 432.8 0.924	480.0 438.8 1.091
CANCER	OBSERVED 67.0 EXPECTED* 89.0 OBS/EXP 0.752	147.0 160.5 0.916	188.0 169.0 1.112

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE
STATE	IOWA
1950 RANK BY POPULATION	438
1950 POP/SQ. MILE	2293
1970 POP/SQ. MILE	2006
1949 MED. FAM. INCOME	3541
1969 MED. FAM. INCOME	9517
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	15
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	30
LAND RESOURCE REGION	M
WATER SOURCE	GROUND
TOTAL HARDNESS	330 PPM
NON-CARBONATE HARDNESS	0 PPM
FLOODINATION STATUS	NO ARTIFICIAL, OPTIMUM NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NH	NF	WM	WP	NH	NF	WM	WP	NH	NF
LT 1	359	359	4	3	367	345	5	8	241	214	4	0
1-4	1399	1362	22	17	1380	1300	24	20	842	801	10	11
5-9	1316	1267	15	15	1298	1173	34	25	1378	1213	12	22
10-14	1210	1200	21	15	1268	1151	20	17	1409	1364	14	18
15-19	1618	1300	21	13	1508	1551	20	17	1337	1432	20	21
20-24	1038	1317	19	23	1101	1167	9	13	1223	957	13	18
25-29	1176	1320	18	24	684	874	10	15	779	804	9	6
30-34	1244	1242	11	14	837	1006	5	16	591	687	7	9
35-39	1105	1270	14	16	979	1066	7	16	775	865	5	9
40-44	1105	1270	14	16	1015	1139	13	13	664	773	5	9
45-49	1027	1055	12	12	1048	1105	14	13	827	928	9	10
50-54	840	881	12	11	971	1079	13	15	849	956	7	5
55-59	768	816	13	10	1000	1045	16	11	785	931	14	18
60-64	715	774	10	8	865	929	15	9	780	956	12	10
65-69	532	630	10	12	721	815	7	13	613	827	4	9
70-74	405	470	11	5	594	736	9	7	440	745	4	8
75-79#	453	541	11	1	502	669	2	7	317	543	3	3
80-84#	0	0	0	0	335	446	2	1	198	409	4	4
85-UP	86	112	4	0	159	244	2	0	130	268	1	3
TOTALS	15908	17269	239	215	15988	17446	214	223	13578	15673	158	201
GRAND TOTAL			33631					33871				29610

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	772.0	680.2	1.135		772.0	680.2	1.135		1121.0	1177.0	0.961	
CV-RENAL	460.0	623.0	0.738		460.0	623.0	0.738		670.0	1270.7	0.526	
HEART	304.0	450.0	0.675		304.0	450.0	0.675		489.0	544.6	0.898	
NON CV-R	312.0	498.0	0.626		312.0	498.0	0.626		507.0	1.040		
CANCER	98.0	198.0	0.495		98.0	198.0	0.495		207.0	192.6	1.075	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	1959	1960	1969	1970	1971	1971
TOTAL	369	403	351	378	401	402	374	1177
CV-RENAL	226	234	186	216	234	231	205	670
HEART	156	148	142	148	174	165	150	489
NON CV-R	143	169	165	162	167	171	169	507
CANCER	48	50	70	63	72	59	76	207

STATE		IOWA	
1950 RANK BY POPULATION	363	1950 RANK BY POPULATION	363
1950 POP./SQ. MILE	3467	1950 POP./SQ. MILE	3467
1970 POP./SQ. MILE	2488	1970 POP./SQ. MILE	2488
1949 MED. FAM. INCOME	3222	1949 MED. FAM. INCOME	3222
1969 MED. FAM. INCOME	8663	1969 MED. FAM. INCOME	8663
URBAN CLASS	INDEPENDENT	URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	24	1950 URBAN AREA RANK	24
JULY MEAN TEMPERATURE	67	JULY MEAN TEMPERATURE	67
MEAN ANN. PRECIPITATION	33	MEAN ANN. PRECIPITATION	33
HARD RESOURCE REGION	M	HARD RESOURCE REGION	M
WATER COVER	SURFACE	WATER COVER	SURFACE
TOTAL HARDNESS	80 PPM	TOTAL HARDNESS	80 PPM
NONCALCARET HARDNESS	50 PPM	NONCALCARET HARDNESS	50 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1958	FLUORIDATION STATUS	FLUORIDATED IN 1958

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	NM	NF	NP	NM	NF	NP	NM	NF	NP	NM	NF	NP	NM	NF	NP	NM	NF	NP
LT 1	1010	922	12	19			980	1046	38	30			734	774	25	20		
1-4	3508	3368	50	57			3988	3808	110	123			2767	2608	100	102		
5-9	3432	3230	51	48			4885	4618	103	119			4173	3883	102	118		
10-14	2728	2764	50	46			3956	3856	81	85			4019	4166	111	118		
15-19	2375	3270	36	37			2883	3312	53	74			4019	4488	87	118		
20-24	2858	3664	64	58			2162	2844	50	95			2714	3802	58	89		
25-29	3191	3370	50	51			2266	2540	57	62			2395	2438	47	62		
30-34	2851	3068	34	37			2706	2754	55	64			1981	2129	42	54		
35-39	2639	2879	47	42			2607	2801	60	55			1959	2144	43	55		
40-44	2541	2781	37	43			2481	2659	48	48			2323	2433	49	47		
45-49	2371	2628	60	37			2278	2497	55	42			2259	2471	39	53		
50-54	2479	2678	34	29			2199	2434	40	33			2193	2402	34	43		
55-59	2356	2408	20	19			2045	2393	33	33			1868	2203	37	37		
60-64	1996	1912	25	26			1924	2278	32	21			1693	2120	29	27		
65-69	1463	1503	21	10			1795	2084	27	26			1376	1894	25	24		
70-74	937	1094	11	10			1318	1491	18	20			1187	1705	21	24		
75-79#	971	1160	8	10			859	998	14	13			880	1333	11	17		
80-84#	0	0	0	0			392	555	6	7			486	861	8	6		
85-0P	155	234	4	4			252	365	3	2			321	599	5	5		
TOTALS	39861	42933	614	583			41976	45333	883	967			39588	44453	873	1011		
GRAND TOTAL				83991						89159						85925		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1791.0	2899.0	2815.0	1791.0	2899.0	2815.0	1791.0	2899.0	2815.0
	1621.3	2884.5	3112.9	1621.3	2884.5	3112.9	1621.3	2884.5	3112.9
	1.105	1.005	0.904	1.105	1.005	0.904	1.105	1.005	0.904
CV-RENAL	935.0	1614.0	1540.0	935.0	1614.0	1540.0	935.0	1614.0	1540.0
	997.7	1648.6	1870.9	997.7	1648.6	1870.9	997.7	1648.6	1870.9
	1.042	0.979	0.823	1.042	0.979	0.823	1.042	0.979	0.823
HEART	601.0	1123.0	1056.0	601.0	1123.0	1056.0	601.0	1123.0	1056.0
	643.5	1700.8	1302.6	643.5	1700.8	1302.6	643.5	1700.8	1302.6
	0.933	0.959	0.811	0.933	0.959	0.811	0.933	0.959	0.811
NON CV-R	856.0	1285.0	1275.0	856.0	1285.0	1275.0	856.0	1285.0	1275.0
	723.6	1235.9	1242.0	723.6	1235.9	1242.0	723.6	1235.9	1242.0
	1.193	1.040	1.027	1.193	1.040	1.027	1.193	1.040	1.027
CANCER	275.0	460.0	520.0	275.0	460.0	520.0	275.0	460.0	520.0
	457.2	468.6	1.110	457.2	468.6	1.110	457.2	468.6	1.110
	1.046	1.006		1.046	1.006		1.046	1.006	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS					CODE				
	1949	1950	49-50 SUM	1959	1960	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	IOWA	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1966
TOTAL	894	897	1791	1014	943	2899	942	949	924	2815	132	1866	1950 POP/SQ. MILE	1652	1866
CV-RENAL	461	474	935	554	536	1614	519	500	500	1540	1970 POP/SQ. MILE	1652	1949 MED. FAM. INCOME	3475	1652
HEART	304	297	601	382	373	368	352	349	355	1056	1969 MED. FAM. INCOME	9326	URBAN CLASS	CENTRAL	9326
NON CV-R	433	423	856	460	417	408	423	428	424	1275	1950 URBAN AREA RANK	130	JAN MEAN TEMPERATURE	19	130
CANCER	140	135	275	165	150	145	177	161	182	520	JULY MEAN TEMPERATURE	76	MEAN ANN. PRECIPITATION	24	76
											LAND RESOURCE REGION	H	WATER COURSE	GROUND	H
											TOILET HABIT	272 PPM	NON-CARBONATE HARDNESS	141 PPM	272 PPM
											FLUORIDATION STATUS	NO ARTIFICIAL	LOW NATURAL		NO ARTIFICIAL, LOW NATURAL

WATERLOO
-150-

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	754	729	46	44	838	795	83	91	612	557	94	76
1-4	2937	2674	141	130	3192	3025	344	366	2410	2337	351	306
5-9	2600	2434	130	131	3761	3481	377	373	3482	3376	529	536
10-14	2121	2055	93	101	3447	3042	269	276	3524	3383	497	518
15-19	1678	2018	90	94	2095	2463	163	171	3014	3200	359	433
20-24	2279	2728	135	127	1710	2238	126	168	2236	2913	189	269
25-29	2600	2716	151	130	1867	1905	163	172	2236	2913	189	269
30-34	2383	2574	110	111	2112	2166	183	186	2174	2153	145	204
35-39	2340	2309	110	103	2141	2271	155	163	1847	1823	147	222
40-44	2124	2137	96	84	2015	2204	128	125	1586	1677	148	176
45-49	1829	1821	65	52	1726	2026	108	114	1836	2011	124	182
50-54	1639	1691	65	52	1526	1866	72	64	1885	2113	139	153
55-59	1577	1691	63	38	1500	1866	72	64	1790	2089	101	105
60-64	1313	1352	35	23	1237	1667	67	47	1463	1912	74	92
65-69	1025	1110	29	27	1135	1340	48	36	1070	1413	61	63
70-74	668	751	12	14	836	1100	25	29	766	1145	43	43
75-79	599	808	6	6	570	774	23	18	565	985	37	32
80-84	0	0	0	0	266	400	9	12	352	652	7	19
85-UP	101	151	4	3	173	273	4	6	223	433	7	11
TOTALS	30676	31874	1379	1269	32330	34476	2433	2516	32759	35946	3253	3575
GRAND TOTAL				65198				71755				75533

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1098.0	2093.0	0.524		1098.0	2093.0	0.524		1098.0	2093.0	0.524	
CV-RENAL	624.0	1158.0	0.539		624.0	1158.0	0.539		624.0	1158.0	0.539	
HEART	404.0	720.0	0.561		404.0	720.0	0.561		404.0	720.0	0.561	
NON CV-R	474.0	944.0	0.502		474.0	944.0	0.502		474.0	944.0	0.502	
CANCER	128.0	340.0	0.376		128.0	340.0	0.376		128.0	340.0	0.376	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949				1950				1959				1960				1961				1969				1970				1971				1972			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	560	538	1098	1098	560	538	1098	1098	560	538	1098	1098	560	538	1098	1098	560	538	1098	1098	560	538	1098	1098	560	538	1098	1098	560	538	1098	1098	560	538	1098	1098
CV-RENAL	318	306	624	624	318	306	624	624	318	306	624	624	318	306	624	624	318	306	624	624	318	306	624	624	318	306	624	624	318	306	624	624	318	306	624	624
HEART	199	205	404	404	199	205	404	404	199	205	404	404	199	205	404	404	199	205	404	404	199	205	404	404	199	205	404	404	199	205	404	404	199	205	404	404
NON CV-R	242	232	474	474	242	232	474	474	242	232	474	474	242	232	474	474	242	232	474	474	242	232	474	474	242	232	474	474	242	232	474	474	242	232	474	474
CANCER	67	61	128	128	67	61	128	128	67	61	128	128	67	61	128	128	67	61	128	128	67	61	128	128	67	61	128	128	67	61	128	128	67	61	128	128

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	MM	NF	MF	NP	WM	WF	MM	NF	MF	NP
LT 1	336	323	7	5	418	398	1717	1622	79	16	264	307
1-4	1330	1302	41	41	1860	1831	1860	1831	70	85	1584	1585
5-9	1320	1304	32	32	1118	1069	1195	1226	47	30	1589	1584
10-14	1118	1069	47	30	1195	1226	1442	1391	73	41	1910	1857
15-19	1195	1226	57	31	1214	1171	1424	1382	74	38	1440	1426
20-24	1323	1382	57	40	1095	1066	1151	1120	32	39	1418	1422
25-29	1404	1375	32	39	1071	1066	1151	1120	32	39	1418	1422
30-34	1092	1201	22	31	1071	1151	1151	1151	23	34	801	809
35-39	1057	1180	31	32	1052	1181	1052	1181	29	47	801	809
40-44	1029	1182	33	29	936	1181	936	1055	29	36	866	970
45-49	926	1006	37	37	930	1035	930	1035	29	30	993	1052
50-54	951	913	33	22	782	932	782	932	25	24	828	1028
55-59	692	821	15	19	658	825	658	825	21	17	801	954
60-64	528	627	17	18	600	819	600	819	20	32	790	1002
65-69	390	407	11	7	532	712	532	712	21	24	570	854
75-79	375	486	9	10	356	497	356	497	12	14	518	748
80-84	0	0	0	0	171	216	171	216	5	10	367	620
85-UP	74	92	2	1	101	139	101	139	4	6	185	436
TOTALS	15825	16805	502	443	17639	18692	16716	18656	810	703	16716	18656
GRAND TOTAL				33575		37574				36885		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	706.0	642.0	1.100		1140.0	1185.7	0.961		1249.0	1383.5	0.903	
CV-RENAL	398.0	359.1	1.108		625.0	676.3	0.923		691.0	836.3	0.826	
HEART	258.0	255.6	1.010		401.0	478.2	0.839		487.0	580.0	0.840	
NON CV-R	308.0	282.9	1.089		515.0	508.8	1.012		558.0	547.2	1.020	
CANCER	88.0	103.3	0.852		173.0	186.2	0.929		209.0	207.5	1.007	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				49-50			
	WM	WF	MM	NF	WM	WF	MM	NF	WM	WF	MM	NF
TOTAL	366	340	706	38	340	340	706	38	340	340	706	38
CV-RENAL	198	200	398	20	198	200	398	20	198	200	398	20
HEART	117	141	238	14	117	141	238	14	117	141	238	14
NON CV-R	168	140	308	18	168	140	308	18	168	140	308	18
CANCER	50	50	88	5	50	50	88	5	50	50	88	5

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POB/SQ. MILE	1970 POB/SQ. MILE	1949 MED. FAR. INCOME	1969 MED. FAR. INCOME	URBAN % CLASS AREA RANK	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
KANSAS	364	3772	2753	3500	3500	INDEPENDENT	35	34	H	GROUND	352 PPM	144 PPM	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE
LT 1	1121	1042	326	267	1117	1124	459	426	1301	1225	364	357
1-4	4413	4163	1169	1241	4080	3774	1568	1664	4508	4264	1495	1507
5-9	4159	4016	1197	1207	4235	4235	1645	1687	6529	6253	2200	2071
10-14	3360	3290	1062	1037	3834	3707	1316	1364	6698	6312	2181	2205
15-19	3134	3657	828	993	2936	3477	943	998	5711	5982	1619	1811
20-24	3937	4555	855	1112	2835	3494	702	857	4850	6340	1119	1564
25-29	4602	4725	950	1178	3017	2863	749	855	4659	4645	1022	1246
30-34	3960	4157	885	1093	2809	2731	679	922	3491	3516	769	932
35-39	3658	3857	943	1013	2691	2988	791	952	3297	3472	718	932
40-44	3284	3458	812	916	2754	3050	731	876	3763	3970	701	931
45-49	3009	3203	787	935	2786	3043	740	794	3866	4169	690	961
50-54	2802	2944	720	798	2622	2877	636	727	3667	3996	703	854
55-59	2520	2746	691	615	2440	2785	679	768	3197	3601	748	760
60-64	2275	2286	516	477	2136	2511	514	634	2704	3132	565	717
65-69	1612	1852	446	530	1751	2204	512	537	1960	2723	538	701
70-74	1070	1244	283	267	1481	1756	382	367	1495	2179	445	576
75-79	972	1337	206	243	788	1136	221	270	1017	1712	327	355
80-84	0	0	0	0	403	602	115	109	357	1049	190	231
85-89	162	259	37	45	242	357	56	82	314	606	122	168
TOTALS	50050	52793	12743	13967	44917	48657	13438	14889	63624	69146	16516	18927
GRAND TOTAL				129553				121901				168213

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL
CV-RENAL	1488.0	1286.5	1.157	1488.0	2499.0	2247.5	1.107	2499.0	2899.0	2477.3	1.124	2899.0
HEART	1028.0	899.3	1.143	1028.0	1777.0	1560.4	1.139	1777.0	2419.0	2130.8	1.145	2419.0
NON CV-R	1411.0	1130.8	1.248	1411.0	2119.0	1850.6	1.145	2119.0	437.0	376.0	1.162	437.0
CANCER	437.0	376.0	1.162	437.0	712.0	622.8	1.143	712.0	907.0	802.8	1.130	907.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959	1961	1960	1961	1969	1970	1971	1971	1971	1971
TOTAL	1385	1514	1561	1498	1549	1498	1855	1773	1695	1695	1695	1695
CV-RENAL	720	768	842	839	839	808	1024	935	891	891	891	891
HEART	504	524	596	576	605	576	733	684	684	684	684	684
NON CV-R	665	746	719	710	710	710	831	838	804	804	804	804
CANCER	200	237	223	244	244	244	308	309	290	290	290	290

STATE
1950 RANK BY POPULATION 76
1950 POP/SG. MILE 2961
1970 POP/SG. MILE 2628
1949 MED. FAM. INCOME 3262
1969 MED. FAM. INCOME 3165
URBAN CLASS FRINGE
1950 URBAN AREA RANK 18
JAN MEAN TEMPERATURE 30
JULY MEAN TEMPERATURE 80
MEAN ANN. PRECIPITATION 35
LAND RESOURCE REGION M
WATER SOURCE SURFACE
TOTAL HARDNESS 276 PPM
NON-CARBONATE HARDNESS 82 PPM
FLUORIDATION STATUS FLUORIDATED IN 1964

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	NP	MM	NP
IT 1	288	300	6	7
1-4	1036	1054	25	24
5-9	1056	979	31	22
10-14	824	838	30	26
15-19	835	1035	21	12
20-24	871	1231	22	34
25-29	1039	1093	22	22
30-34	987	926	20	22
35-39	837	1001	18	19
40-44	835	899	14	19
45-49	730	787	21	22
50-54	661	696	22	17
55-59	586	639	19	16
60-64	512	601	16	16
65-69	359	492	14	9
70-74	320	348	11	7
75-79*	308	397	5	13
80-84*	0	0	0	0
85-UP	69	78	2	1
TOTALS	12153	13394	319	310
GRAND TOTAL				26176

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	553.0	999.0	973.0
EXPECTED*	512.0	1103.1	1244.3
OBS/EXP	1.080	0.906	0.801
CV-RENAL			
OBSERVED	272.0	524.0	512.0
EXPECTED*	287.4	578.3	716.9
OBS/EXP	0.946	0.906	0.714
HEART			
OBSERVED	169.0	327.0	325.0
EXPECTED*	203.4	407.7	498.9
OBS/EXP	0.831	0.802	0.651
NON CV-R			
OBSERVED	281.0	475.0	461.0
EXPECTED*	224.7	524.8	497.4
OBS/EXP	1.251	0.905	0.927
CANCER			
OBSERVED	82.0	148.0	184.0
EXPECTED*	80.5	161.7	183.2
OBS/EXP	1.019	0.915	1.005

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	264	289	553	328	342	329	999	324	309	340	973
CV+REVAL	124	148	272	183	174	167	524	166	162	184	512
HEART	72	97	169	109	105	113	327	99	119	125	325
NON CV+R	140	141	281	145	168	162	475	158	147	156	461
CANCER	45	37	82	40	51	51	148	65	161	58	184

CITY CHARACTERISTICS

CODE

KANSAS
461
5690
2387
3260
8720
INDEPENDENT
-
31
86
23
B
GROUND AND SURFACE
552 PPM
184 PPM
FLUORIDATED IN 196

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	NP	NM	NP
LT 1-	734	765	69	69
1-4	2883	2815	281	264
5-9	2507	2618	242	269
10-14	1997	2026	203	210
15-19	2021	2479	211	243
20-24	2667	3557	195	292
25-29	3173	3770	250	300
30-34	2602	3703	223	335
35-39	2164	2559	207	252
40-44	2211	2668	227	220
45-49	2145	2421	194	269
50-54	1970	2320	194	220
55-59	1748	2191	189	196
60-64	1465	1811	126	139
65-69	1189	1547	116	137
70-74	880	1211	67	67
75-79	919	1425	64	72
80-84			0	0
85-UP	181	306	12	19
TOTALS	33456	36792	3070	3473
TOTAL TOTAL				78791

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE		1949-50	1959-61	1969-71
TOTAL	OBSERVED	1782.0	3309.0	3520.0
	EXPECTED*	1695.9	3793.2	4262.7
	OBS/EXP	1.051	0.872	0.826
CV-RENAL	OBSERVED	1036.0	1840.0	1919.0
	EXPECTED*	985.1	2132.5	2516.4
	OBS/EXP	1.073	0.863	0.763
HEART	OBSERVED	671.0	1110.0	1313.0
	EXPECTED*	675.7	1489.7	1737.4
	OBS/EXP	0.993	0.746	0.756
NON CV-R	OBSERVED	746.0	1469.0	1601.0
	EXPECTED*	730.8	1660.3	1746.3
	OBS/EXP	1.021	0.885	0.917
CANCER				

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	846	936	1782	1049	1147	1113	3309	1234	1156	1130	3520
CV-RENAL	505	531	1036	596	616	628	1840	658	659	602	1919
HEART	314	357	671	340	384	386	1110	456	465	392	1313
NON CV-R	341	405	746	453	531	401	1469	576	497	528	1601
CANCER	118	137	255	159	193	183	535	194	196	202	592

CITY CHARACTERISTICS	CODE
1. City or town	1
2. Suburban	2
3. Rural	3
4. Unincorporated	4
5. Other	5

STATE	KANSAS
1950 RANK BY POPULATION	144
1950 POP./SQ. MILE	6303
1970 POP./SQ. MILE	2632
1950 MED. F.M. INCOME	3355
1969 MED. F.M. INCOME	9652
1950 URBAN CLASS	131
1950 URBAN AREA RANK	131
JULY MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	80
MEAN ANNUAL PRECIPITATION	33
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	100 PPM
NON-CARBONATE HARDNESS	56 PPM
FLOIDATION STATUS	FLOIDING

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	1815	1694	80	88	3008	2909	405	486
1-4	7387	6976	382	365	11684	11023	1537	1517
5-9	6589	6413	348	338	12263	12007	1432	1446
10-14	4775	4682	301	291	10457	10127	1020	1029
15-19	4231	5171	302	288	7109	8661	633	752
20-24	5808	7126	346	415	7212	8881	632	844
25-29	7230	8413	371	430	8567	8443	820	913
30-34	6886	7327	320	350	8320	8256	749	860
35-39	6205	6545	312	367	8641	8928	681	708
40-44	5499	5725	306	316	7475	7835	557	551
45-49	4490	4870	256	276	6703	7179	437	452
50-54	3999	4416	230	192	5800	6031	341	369
55-59	3298	3820	173	192	4537	5337	310	317
60-64	2717	3294	133	124	3724	4388	226	215
65-69	2232	2743	128	109	2759	3726	174	204
70-74	1476	1927	59	59	2082	3127	134	109
75-79*	1448	2004	51	47	1339	2102	77	83
80-84*	0	0	0	0	716	1223	36	41
85-UP	256	423	15	21	436	724	32	30
TOTALS	76341	83569	4113	4256	112832	120707	10233	10926
GRAND TOTAL				168279				254698

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	SUM		1959	1960	1961	SUM
TOTAL	1558	1588	3146		2098	2067	2070	6235
CV-RENEWAL	802	827	1629		995	1044	1044	3046
HEART	522	535	1057		709	679	732	2120
NON CV-R	756	761	1517		1072	1026	1026	3189
CANCER	216	236	452		319	341	341	984

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
TOTAL		3146.0	6235.0	7198.0		3146.0	6235.0	7198.0
		2632.6	6369.3	7906.0		2632.6	6369.3	7906.0
		1.111	0.979	0.910		1.111	0.979	0.910
CV-RENEWAL								
		1629.0	3046.0	3659.0		1629.0	3046.0	3659.0
		1525.8	3362.8	4456.0		1525.8	3362.8	4456.0
		1.068	0.906	0.821		1.068	0.906	0.821
HEART								
		1057.0	2120.0	2605.0		1057.0	2120.0	2605.0
		1084.5	2377.4	3114.6		1084.5	2377.4	3114.6
		0.975	0.892	0.837		0.975	0.892	0.837
NON CV-R								
		1517.0	3189.0	3539.0		1517.0	3189.0	3539.0
		1306.7	3006.4	3450.0		1306.7	3006.4	3450.0
		1.161	1.061	1.026		1.161	1.061	1.026
CANCER								
		452.0	984.0	1338.0		452.0	984.0	1338.0
		451.3	974.7	1204.3		451.3	974.7	1204.3
		1.002	1.010	1.111		1.002	1.010	1.111

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	KANSAS
1950 RANK BY POPULATION	58
1950 POP/SQ. MILE	6548
1970 POP/SQ. MILE	3197
1949 MED. FAM. INCOME	3408
1969 MED. FAM. INCOME	9523
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	64
JAN MEAN TEMPERATURE	32
JULY MEAN TEMPERATURE	80
MEAN ANN. PRECIPITATION	30
LAND RESOURCE REGION	H
WATER SOURCE	GROUND
TOTAL HARDNESS	86 PPM
NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	MM	NP
LT-1	345	300	14	9
1-4	1356	1303	29	31
5-9	1344	1277	30	24
10-14	1255	1213	30	24
15-19	982	1205	23	28
20-24	1093	1355	33	41
25-29	1237	1323	27	28
30-34	1063	1188	26	24
35-39	1036	1164	22	36
40-44	1027	1101	27	35
45-49	956	971	23	32
50-54	803	864	26	30
55-59	706	683	25	25
60-64	508	550	15	16
65-69	402	452	10	13
70-74	284	353	3	4
75-79 #	245	304	17	9
80-84 #	0	0	0	0
85-89	37	49	1	1
TOTALS	14649	15691	381	410
TOTALS TOTAL				31131

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	563.0	962.0	1012.0
EXPECTED*	498.3	962.0	1091.4
OBS/EXP	1.153	1.061	0.927
CV-RENAL			
OBSERVED	265.0	525.0	586.0
EXPECTED*	259.4	508.7	656.4
OBS/EXP	1.022	1.032	0.893
HEART			
OBSERVED	176.0	368.0	414.0
EXPECTED*	186.6	362.3	459.4
OBS/EXP	0.943	1.016	0.901
NON CV-R			
OBSERVED	298.0	437.0	426.0
EXPECTED*	228.9	397.7	435.0
OBS/EXP	1.302	1.099	0.979
CANCER			
OBSERVED	81.0	154.0	174.0
EXPECTED*	80.1	146.7	171.3
OBS/EXP	1.011	1.050	1.016

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM
TOTAL	293	270	563	312	318	332	962
CV-RENAL	125	140	265	163	181	181	525
HEART	85	92	176	114	138	116	368
NON CV-R	168	130	298	149	137	151	437
CANCER	44	37	81	53	40	61	154

CITY CHARACTERISTICS	CODE
1. City or town	1
2. Suburban	2
3. Rural	3
4. Other	4

STATE	1950 BANK BY POPULATION	395
KENTUCKY		395
	1950 POP./SQ. MILE	3891
	1970 POP./SQ. MILE	3656
	1949 MED. FAM. INCOME	3190
	1969 MED. FAM. INCOME	9018
	URBAN CLASS	CENTRAL
	1950 URBAN AREA BANK	77
	JAN MEAN TEMPERATURE	35
	JULY MEAN TEMPERATURE	76
	MEAN ANN. PRECIPITATION	42
	LAND RESOURCE REGION	N
	WATER SOURCE	SURFACE
	TOTAL HARDNESS	93 PPM
	NON-CARBONATE HARDNESS	56 PPM
	FLUORIDATION STATUS	FLUORIDED

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	WF
1T 1	625	651	30	26	720	716	58	47	58	47	477	438
1-4	2495	2575	133	131	2574	2561	173	162	173	162	1821	1777
5-9	2223	2132	135	153	2773	2609	199	188	199	188	2325	2212
10-14	1814	1875	116	107	2358	2409	142	139	142	139	2322	2242
15-19	1768	2056	117	98	1703	2101	114	126	114	126	2087	2171
20-24	2342	2750	123	148	1683	2140	102	99	102	99	1769	2237
25-29	2448	2747	128	142	1790	1728	79	101	79	101	1430	1383
30-34	2178	2378	114	123	1810	1844	99	129	99	129	1058	1227
35-39	2018	2273	124	160	1673	1865	96	113	96	113	1018	1114
40-44	2002	2275	125	141	1523	1762	88	110	88	110	1294	1444
45-49	1989	1941	138	168	1432	1741	90	111	90	111	1265	1474
50-54	1764	1960	127	125	1465	1701	97	117	97	117	1202	1502
55-59	1518	1702	102	105	1413	1561	92	123	92	123	1181	1376
60-64	1228	1511	79	77	1200	1484	97	92	97	92	893	1276
65-69	970	1261	73	70	956	1368	50	46	50	46	736	1117
70-74	611	933	28	44	756	1168	35	44	35	44	427	896
75-79#	629	917	30	36	463	1182	3	35	3	35	251	556
80-84#	0	0	0	0	230	482	5	10	5	10	145	318
85-UP	97	184	7	9	118	197	8	7	8	7	145	318
TOTALS	28739	32121	1729	1863	26680	30169	1688	1839	1688	1839	22721	26379
GRAND TOTAL				6452				60376			1574	52535

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1597.0	1228.1	1.300		2429.0	1937.0	1.254		2504.0	1955.4	1.261	
CV-RENAL	863.0				1297.0				1433.0			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
HEART	627.0	482.2	1.300		908.0	769.3	1.180		1057.0	808.4	1.308	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
MON CV-R	734.0				1132.0				1071.0			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
CANCER	225.0	198.7	1.133		399.0	299.6	1.301		437.0	299.6	1.459	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	
	STATE	KENTUCKY
1950 RANK BY POPULATION	1871	1871
1950 POP/SG. MILE	15016	15016
1949 FCE/SG. MILE	3436	3436
1949 MED. FAM. INCOME	7719	7719
1969 MED. FAM. INCOME	7719	7719
URBAN CLASS.	FRNCE	FRNCE
1950 URBAN AREA RANK	31	31
JAN MEAN TEMPERATURE	75	75
JULY MEAN TEMPERATURE	39	39
MEAN ANN. PRECIPITATION	M	M
LAND RESOURCE REGION		
WATER SOURCE		SURFACE
TOTAL HARDNESS	112 PPM	112 PPM
NON-CARBONATE HARDNESS	68 PPM	68 PPM
FLUORIDATION STATUS		UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	401	379	131	109	617	519	220	223	928	907	201	175
1-4	1396	1319	450	513	1808	1786	885	852	3124	2921	761	731
5-9	1134	1138	510	506	1680	1728	878	826	3651	3504	1097	1065
10-14	948	1025	428	479	1470	1497	637	681	3223	3253	1061	1066
15-19	1455	1745	375	417	2046	2320	499	523	4487	5039	890	864
20-24	3020	2628	432	565	2838	2976	398	425	7041	7909	608	847
25-29	2233	1879	523	554	1931	1594	471	595	4301	4117	513	660
30-34	1465	1509	449	614	1328	1384	484	590	4284	2706	426	565
35-39	1352	1475	505	589	1324	1325	523	550	2243	2230	432	548
40-44	1268	1367	505	527	1154	1219	433	563	2130	2223	465	596
45-49	1057	1365	481	508	1113	1311	456	509	2047	2171	443	496
50-54	991	1237	425	493	1065	1197	412	471	1655	1879	372	498
55-59	891	1068	370	374	940	1200	389	450	1431	1750	374	445
60-64	754	1004	296	261	759	1025	316	373	1153	1562	340	409
65-69	658	982	293	295	711	1036	313	366	889	1378	306	389
70-74	510	657	161	167	558	918	234	270	646	1110	211	296
75-79*	510	804	147	167	419	700	138	152	429	861	145	200
80-84*	0	0	0	0	233	401	81	73	273	625	86	135
85-UP	74	152	33	32	118	253	35	55	204	444	72	81
TOTALS	20117	21733	6514	7170	22112	24389	7762	8547	42679	46589	8803	10066
GRAND TOTAL				55534				62810				108137

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL												
		753.0	1372.0	1658.0								
		658.8	1208.4	1610.8								
		1.143	1.135	1.029								
HEART												
		511.0	940.0	1236.0								
		451.8	822.4	1095.8								
		1.131	1.143	1.128								
NON CV-R												
		667.0	1066.0	1473.0								
		530.9	959.6	1303.9								
		1.256	1.111	1.130								
CANCER												
		181.0	353.0	525.0								
		180.3	312.8	414.9								
		1.004	1.129	1.265								

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
STATE												
1950 RANK BY POPULATION												
1950 POP/50. MILE												
1970 POP/50. MILE												
1949 MED. FAM. INCOME												
1969 MED. FAM. INCOME												
URBAN CLASS												
1950 URBAN AREA RANK												
JAN MEAN TEMPERATURE												
JULY MEAN TEMPERATURE												
MEAN ANN. PRECIPITATION												
LAND RESOURCE REGION												
WATER SOURCE												
TOTAL HARDNESS												
NON-CARBONATE HARDNESS												
FLUORIDATION STATUS												

FLUORIDATED IN 1954

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	8752.0	14178.0	14943.0
EXPECTED*	6771.7	12528.1	13273.6
OBS/EXP	1.292	1.132	1.118
CV-RENAL			
OBSERVED	4577.0	7762.0	7994.0
EXPECTED*	3616.1	6931.9	7711.5
OBS/EXP	1.266	1.120	1.037
HEART			
OBSERVED	3225.0	5122.0	5539.0
EXPECTED*	2533.8	4814.7	5288.1
OBS/EXP	1.273	1.064	1.047
NON CV-R			
OBSERVED	4175.0	6416.0	6849.0
EXPECTED*	3155.6	5596.2	5562.1
OBS/EXP	1.323	1.146	1.231
CANCER			
OBSERVED	1154.0	2210.0	2480.0
EXPECTED*	1057.8	1907.8	1989.6
OBS/EXP	1.091	1.158	1.246

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE
STATE	KENTUCKY
1950 RANK BY POPULATION	30
1950 POP/AC. MILE	9251
1970 POP/AC. MILE	6025
1949 MED. FAM. INCOME	3166
1963 MED. FAM. INCOME	8564
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	27
JAN MEAN TEMPERATURE	34
JULY MEAN TEMPERATURE	77
MEAN ANNUAL PRECIPITATION	41
LAND RESOURCE REGION	N
WATER SOURCE	SURFACE
TOTAL HARDNESS	90 PPM
NON-CARBONATE HARDNESS	54 PPM
FLUORIDATION STATUS	FLUORIDATED

POPULATION
BY RACE SEX AND CENSUS YEAR

AGE GROUP	1950			1960			1970		
	WM	MF	NE	WM	MF	NE	WM	MF	NE
LT 1	3627	3388	642	3812	3765	969	2150	2071	926
1-4	13099	13099	2257	15967	15573	3793	7764	7343	3332
5-9	12029	11954	2060	13061	14665	3153	11192	10802	5019
10-14	9406	9605	1785	10661	12834	3045	12197	12070	4897
15-19	8668	10352	1585	10661	12834	3045	12197	12070	4897
20-24	12391	11884	2264	9596	11800	2033	11752	12471	4694
25-29	14286	12264	2209	10095	10088	1518	11577	12688	3571
30-34	11806	12766	2582	9991	10029	1720	8619	8395	2633
35-39	11307	12086	2293	10252	10785	1930	6279	6631	2414
40-44	10380	11430	2178	9233	10362	2168	6174	6824	1851
45-49	9359	10290	2153	8128	10478	1996	7487	8259	2001
50-54	8400	9237	1852	7971	9200	1828	8166	9188	2611
55-59	7034	7741	1465	6711	7889	1911	7610	8870	1940
60-64	5618	6664	1036	6516	7889	1385	6012	8881	2136
65-69	4429	5836	903	5361	7021	1190	6427	8693	1609
70-74	3116	4368	461	3673	5679	739	5133	7504	1765
75-79	2847	4534	421	2423	4078	494	3736	6310	928
80-84	0	0	0	1274	2341	192	2391	4557	593
85-UP	392	864	70	680	1520	156	830	2074	194
TOTALS	148355	163002	27328	151519	168671	33365	127786	146725	40214
GRAND TOTAL			369129			37084			46747
						390639			361472

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE
LT 1	327	335	6	10	417	361	11	11	272	249	9	12
1-4	1332	1350	31	44	1431	1477	37	38	1000	984	44	57
5-9	1094	1150	37	50	1442	1422	36	47	1273	1228	52	60
10-14	1623	1659	36	26	1302	1257	29	39	1258	1241	41	49
15-19	923	992	25	27	937	1113	24	44	1127	1174	31	34
20-24	1129	1347	28	36	945	1077	19	23	970	1154	23	42
25-29	1306	1364	34	44	924	945	13	16	772	749	20	34
30-34	1061	1178	34	43	901	928	17	29	630	670	17	23
35-39	1056	1046	43	45	849	984	26	30	575	562	12	9
40-44	1074	1074	33	39	807	947	24	29	621	678	19	19
45-49	888	890	34	44	824	858	24	21	548	754	19	30
50-54	785	891	40	29	791	813	17	22	435	721	16	14
55-59	721	793	22	32	702	738	18	21	352	631	16	16
60-64	588	700	32	19	543	663	19	24	429	571	20	13
65-69	464	632	14	17	481	636	18	17	377	500	10	15
70-74	359	429	5	4	311	396	12	8	233	414	5	12
75-79	313	436	0	5	211	324	3	2	114	250	3	6
80-84	0	0	0	0	108	364	3	0	55	155	3	4
85-UP	34	68	0	4	60	112	0	2				
TOTALS	14418	15646	462	518	14025	15255	357	433	11862	13318	362	456
GRAND TOTAL				31044				30070				25998

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	768.0	1140.0	1076.0	565.0	859.4	868.3	565.0	859.4	1.233
CV-RENAL	378.0	605.0	629.0	309.2	501.6	509.5	309.2	501.6	1.235
HEART	282.0	437.0	485.0	221.3	355.6	355.8	221.3	355.6	1.363
NON CV-R	390.0	535.0	447.0	255.8	397.8	358.8	255.8	397.8	1.246
CANCER	107.0	192.0	178.0	92.3	141.2	132.4	92.3	141.2	1.345
	1.159	1.359		1.525	1.345		1.525	1.345	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				49-50				1959				1960				1961				59-61				1970				1971				69-71				STATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

CITY CHARACTERISTICS

CODE

STATE	KENTUCKY
1950 RANK BY POPULATION	387
1950 POP/SQ. MILE	9701
1970 POP/SQ. MILE	9285
1949 MED. FAM. INCOME	2988
1969 MED. FAM. INCOME	7686
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	15
JAN MEAN TEMPERATURE	31
JULY MEAN TEMPERATURE	75
MEAN ANN. PRECIPITATION	39
LAND RESOURCE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	110 PPM
NON-CARBONATE HARDNESS	68 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	373	336	17	22	533	505	46	44	450	421	32	36
1-4	1399	1454	102	82	1954	1834	141	144	1725	1687	119	161
5-9	1403	1339	96	89	2081	2069	165	156	2423	2372	163	193
10-14	1115	1109	93	85	1820	1922	131	111	2497	2369	170	199
15-19	912	1151	94	89	1397	1472	105	96	2029	2164	147	172
20-24	1059	1563	99	88	1148	1475	58	84	1762	2132	100	101
25-29	1251	1543	59	99	1209	1414	66	72	1570	1667	89	107
30-34	1147	1303	72	84	1308	1450	58	92	1379	1432	76	83
35-39	1110	1232	84	84	1329	1494	70	99	1235	1373	59	85
40-44	897	993	84	115	1111	1279	75	78	1275	1404	64	68
45-49	758	871	81	106	1054	1190	73	94	1313	1529	65	109
50-54	677	838	65	80	835	995	73	91	1078	1307	74	76
55-59	615	697	60	74	705	866	55	92	953	1176	66	85
60-64	550	679	60	59	579	771	56	67	763	1033	67	70
65-69	454	582	62	72	532	757	60	65	574	912	50	76
70-74	363	443	44	37	457	691	47	42	475	757	35	47
75-79*	302	459	36	49	312	438	34	41	351	604	19	41
80-84*	0	0	0	0	159	245	12	15	211	400	27	25
85-UP	59	92	12	9	80	162	10	21	116	282	8	25
TOTALS	14444	16684	1200	1323	18603	21029	1335	1504	22119	25021	1430	1759
GRAND TOTAL				33651				42471				50329

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1961				59-61				69-71			
	1949	1950	1951	SUM	1959	1960	1961	SUM	1961	1962	1963	SUM	1961	1962	1963	SUM	1971	1972	1973	SUM
TOTAL	392	383	775		437	466	501	1404	535	504	543	1582	543	504	543	1582	543	504	543	1582
CV-RENAL	230	215	445		243	240	284	767	308	310	310	899	310	310	310	899	310	310	310	899
HEART	159	139	298		172	165	206	543	215	215	202	615	202	215	202	615	202	215	202	615
NON CV-R	162	168	330		194	226	217	637	227	227	233	683	233	227	233	683	233	227	233	683
CANCER	32	42	74		66	81	86	233	76	76	82	230	82	76	82	230	82	76	82	230

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	KENTUCKY
1950 RANK BY POPULATION	362
1950 POP/SQ. MILE	8413
1970 POP/SQ. MILE	5921
1949 MED. FAM. INCOME	2742
1969 MED. FAM. INCOME	8852
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	34
JULY MEAN TEMPERATURE	77
MEAN ANN. PRECIPITATION	43
LAND RESOURCE REGION	N
WATER SOURCE	GROUND
TOTAL HARDNESS	108 PPM
NON-CARBONATE HARDNESS	61 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1953

CAUSE	1949-50	1959-61	1969-71
1. <i>Chlamydia trachomatis</i>	100	100	100
2. <i>Neisseria gonorrhoeae</i>	100	100	100
3. <i>Haemophilus ducreyi</i>	100	100	100
4. <i>Herpes simplex virus</i>	100	100	100
5. <i>Mycoplasma genitalium</i>	100	100	100
6. <i>Ureaplasma urealyticum</i>	100	100	100
7. <i>Trichomonas vaginalis</i>	100	100	100
8. <i>Candida albicans</i>	100	100	100
9. <i>Streptococcus pyogenes</i>	100	100	100
10. <i>Staphylococcus aureus</i>	100	100	100
11. <i>Pseudomonas aeruginosa</i>	100	100	100
12. <i>Escherichia coli</i>	100	100	100
13. <i>Salmonella enteritidis</i>	100	100	100
14. <i>Shigella flexneri</i>	100	100	100
15. <i>Yersinia enterocolitica</i>	100	100	100
16. <i>Campylobacter jejuni</i>	100	100	100
17. <i>Legionella pneumophila</i>	100	100	100
18. <i>Mycobacterium tuberculosis</i>	100	100	100
19. <i>Coccidioides immitis</i>	100	100	100
20. <i>Histoplasma capsulatum</i>	100	100	100
21. <i>Blastomyces dermatitidis</i>	100	100	100
22. <i>Cryptosporidium parvum</i>	100	100	100
23. <i>Isospora belli</i>	100	100	100
24. <i>Toxoplasma gondii</i>	100	100	100
25. <i>Microsporidium</i>	100	100	100
26. <i>Giardia lamblia</i>	100	100	100
27. <i>Entamoeba histolytica</i>	100	100	100
28. <i>Trichinella spiralis</i>	100	100	100
29. <i>Strongyloides stercoralis</i>	100	100	100
30. <i>Hookerella</i>	100	100	100
31. <i>Parascaris</i>	100	100	100
32. <i>Trichostrongylus axei</i>	100	100	100
33. <i>Ostertagia circumcincta</i>	100	100	100
34. <i>Haemonchus contortus</i>	100	100	100
35. <i>Trichostrongylus colubriformis</i>	100	100	100
36. <i>Trichostrongylus colubriformis</i>	100	100	100
37. <i>Trichostrongylus axei</i>	100	100	100
38. <i>Trichostrongylus colubriformis</i>	100	100	100
39. <i>Trichostrongylus colubriformis</i>	100	100	100
40. <i>Trichostrongylus colubriformis</i>	100	100	100
41. <i>Trichostrongylus colubriformis</i>	100	100	100
42. <i>Trichostrongylus colubriformis</i>	100	100	100
43. <i>Trichostrongylus colubriformis</i>	100	100	100
44. <i>Trichostrongylus colubriformis</i>	100	100	100
45. <i>Trichostrongylus colubriformis</i>	100	100	100
46. <i>Trichostrongylus colubriformis</i>	100	100	100
47. <i>Trichostrongylus colubriformis</i>	100	100	100
48. <i>Trichostrongylus colubriformis</i>	100	100	100
49. <i>Trichostrongylus colubriformis</i>	100	100	100
50. <i>Trichostrongylus colubriformis</i>	100	100	100
51. <i>Trichostrongylus colubriformis</i>	100	100	100
52. <i>Trichostrongylus colubriformis</i>	100	100	100
53. <i>Trichostrongylus colubriformis</i>	100	100	100
54. <i>Trichostrongylus colubriformis</i>	100	100	100
55. <i>Trichostrongylus colubriformis</i>	100	100	100
56. <i>Trichostrongylus colubriformis</i>	100	100	100
57. <i>Trichostrongylus colubriformis</i>	100	100	100
58. <i>Trichostrongylus colubriformis</i>	100	100	100
59. <i>Trichostrongylus colubriformis</i>	100	100	100
60. <i>Trichostrongylus colubriformis</i>	100	100	100
61. <i>Trichostrongylus colubriformis</i>	100	100	100
62. <i>Trichostrongylus colubriformis</i>	100	100	100
63. <i>Trichostrongylus colubriformis</i>	100	100	100
64. <i>Trichostrongylus colubriformis</i>	100	100	100
65. <i>Trichostrongylus colubriformis</i>	100	100	100
66. <i>Trichostrongylus colubriformis</i>	100	100	100
67. <i>Trichostrongylus colubriformis</i>	100	100	100
68. <i>Trichostrongylus colubriformis</i>	100	100	100
69. <i>Trichostrongylus colubriformis</i>	100	100	100
70. <i>Trichostrongylus colubriformis</i>	100	100	100
71. <i>Trichostrongylus colubriformis</i>	100	100	100
72. <i>Trichostrongylus colubriformis</i>	100	100	100
73. <i>Trichostrongylus colubriformis</i>	100	1	

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	257	252	187	213	297	297	264	287	209	212	198	172
1-4	936	874	676	695	1079	955	932	965	681	672	871	813
5-9	897	891	669	662	1116	1062	1128	1169	1064	1068	1109	1020
10-14	678	725	595	641	1005	1002	871	904	1111	1074	1047	1146
15-19	558	695	469	618	699	935	630	645	948	1113	998	1004
20-24	623	965	420	656	768	917	452	610	951	1071	552	770
25-29	819	1026	526	679	735	725	433	522	652	695	385	521
30-34	892	885	455	581	641	728	414	593	568	610	353	462
35-39	628	688	490	623	667	833	406	532	510	726	372	452
40-44	687	771	483	586	691	746	395	568	616	829	362	527
45-49	645	687	410	473	694	811	467	465	678	940	362	456
50-54	506	538	348	387	585	665	407	432	678	940	398	473
55-59	427	472	279	269	505	634	303	318	585	738	398	459
60-64	318	362	205	208	394	521	261	265	474	655	314	416
65-69	252	322	241	252	324	464	164	206	368	665	286	390
70-74	154	223	95	111	240	310	124	134	273	520	269	265
75-79*	140	186	114	106	174	235	124	134	194	342	129	164
80-84*	0	0	0	0	78	124	42	49	99	197	53	111
85-UP	14	34	16	32	49	62	30	45	71	186	52	66
TOTALS	9631	10798	6658	7826	10713	12066	8124	9376	10708	12769	8306	9774
GRAND TOTAL				34513				40279				41557

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE 1949-50 1959-61 1969-71

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	747.0	600.8	1.243	1388.0	1216.5	1.141	1697.0	1468.6	1.156
CV-RENAL									
OBSERVED	305.6	292.6	1.042	714.0	621.6	1.149	940.0	824.0	1.141
HEART									
OBSERVED	218.0	198.6	1.097	532.0	419.8	1.267	700.0	552.1	1.268
NON CV-R									
OBSERVED	442.0	306.2	1.434	674.0	594.9	1.133	757.0	644.6	1.174
CANCER									
OBSERVED	87.0	86.9	1.001	192.0	174.2	1.102	238.0	210.3	1.132

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	341	406	468	477	443	567	545	585
CV-RENAL	128	177	243	230	241	329	295	316
HEART	96	122	170	162	180	249	253	268
NON CV-R	213	229	225	247	202	238	250	289
CANCER	37	50	71	73	48	69	73	56
STATE								
1950 RANK BY POPULATION								
1970 POP/SQ. MILE								
1970 POP/SQ. MILE								
1949 POP/SQ. MILE								
1949 MED. FAM. INCOME								
1969 MED. FAM. INCOME								
URBAN CLASS								
1950 URBAN AREA RANK								
JAN MEAN TEMPERATURE								
JULY MEAN TEMPERATURE								
MEAN ANNU. PRECIPITATION								
LAND RESOURCE REGION								
WATER SOURCE								
TOTAL HARDNESS								
NON-CARBONATE HARDNESS								
FLUORIDATION STATUS								

LOUISIANA
348.31
383
2301
6452
INDEPENDENT
-
51
83
56
0
GROUND
213 PPM
11 PPM
NO ARTIFICIAL/OPTIMUM NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 1720.0 EXPECTED* 1655.9 OBS/EXP 1.039	3582.0 3479.3 1.030	4633.0 4361.8 1.062
CV-PENAL	OBSERVED 868.0 EXPECTED* 750.2 OBS/EXP 1.157	1886.0 1681.8 1.121	2416.0 2323.2 1.040
HEART	OBSERVED 564.0 EXPECTED* 515.3 OBS/EXP 1.095	1279.0 1158.1 1.104	1639.0 1594.5 1.028
NON CV-R	OBSERVED 852.0 EXPECTED* 905.7 OBS/EXP 0.941	1696.0 1797.5 0.944	2217.0 2038.6 1.088
CANCER	OBSERVED 217.0 EXPECTED* 235.4 OBS/EXP 0.922	531.0 510.5 1.040	718.0 658.3 1.091

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE/SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	45030	45417	16285	18897	52158	54658	21268	24335	57513	61616	21386	25448
GRAND TOTAL				125629				152419				165963

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50	1959	1960	1961	59-61	1969	1970	1971	69-71
TOTAL	870	850	1720	1171	1251	1160	3582	1568	1538	1527	4533
CV-PENAL	438	430	868	601	602	589	1819	819	818	781	2436
HEART	295	269	568	407	474	398	1276	557	538	554	1639
NON CV-R	432	420	852	570	568	556	1696	749	722	704	2277
CANCER	96	121	217	170	174	187	531	251	230	237	718

CITY CHARACTERISTICS

STATE	LOUISIANA
1950 RANK BY POPULATION	81
1950 POP./SQ. MILE	4160
1970 POP./SQ. MILE	4108
1949 MED. FAM. INCOME	3593
1969 MED. FAM. INCOME	5151
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	88
JAN MEAN TEMPERATURE	52
JULY MEAN TEMPERATURE	91
MEAN ANN. PRECIPITATION	59
LAND RESOURCE REGION	F
WATER SOURCE	GROUND
TOTAL HARDNESS	38 PPM
NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NE	WM	WF	NM	WF	WM	WF	NM	WF	WM	WF	NM	WF	WM	WF
LT 1	335	324	125	121	367	333	204	188	468	440	248	216	468	440	248	216	468	440
1-4	1174	1170	422	438	1265	1231	698	673	1794	1614	865	877	1794	1614	865	877	1794	1614
5-9	1117	1075	416	426	1415	1386	761	752	2600	2518	1130	1091	2600	2518	1130	1091	2600	2518
10-14	840	832	393	430	1226	1206	602	636	2709	2723	1127	1110	2709	2723	1127	1110	2709	2723
15-19	1027	1165	316	422	1495	1574	419	507	3171	3353	956	1005	3171	3353	956	1005	3171	3353
20-24	1636	1537	294	429	1658	1333	366	487	3089	3137	626	793	3089	3137	626	793	3089	3137
25-29	1306	1246	322	360	976	944	381	447	1610	1572	534	625	1610	1572	534	625	1610	1572
30-34	1063	1001	282	339	840	801	289	407	1310	1255	484	598	1310	1255	484	598	1310	1255
35-39	735	703	206	261	879	867	240	303	1154	1127	405	506	1154	1127	405	506	1154	1127
40-44	753	711	286	309	879	889	240	303	1154	1127	405	506	1154	1127	405	506	1154	1127
45-49	679	656	195	217	783	895	207	297	1023	1056	382	452	1023	1056	382	452	1023	1056
50-54	487	521	130	209	678	801	208	258	1223	1225	270	352	1223	1225	270	352	1223	1225
55-59	375	435	125	158	609	631	125	192	925	1083	252	289	925	1083	252	289	925	1083
60-64	288	310	106	118	370	479	116	189	717	904	209	249	717	904	209	249	717	904
65-69	219	292	105	109	282	417	121	182	511	713	177	234	511	713	177	234	511	713
70-74	127	184	57	68	196	284	82	96	307	506	93	156	307	506	93	156	307	506
75-79*	112	182	54	49	111	205	45	57	199	341	47	105	199	341	47	105	199	341
80-84*	0	0	0	0	68	109	30	35	88	228	25	62	88	228	25	62	88	228
85-UP	14	35	8	13	32	83	15	27	68	169	29	63	68	169	29	63	68	169
TOTALS	12501	12718	3829	4493	14244	14729	5355	6072	24988	26590	8185	9145	24988	26590	8185	9145	24988	26590
GRAND TOTAL				33541				40400				68908						

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	484.0	484.0	1.000	1048.0	1048.0	1.000	1481.0	1481.0	1.000
CV-RENAL	207.0	207.0	1.000	464.0	464.0	1.000	715.0	715.0	1.000
HEART	150.0	150.0	1.000	305.0	305.0	1.000	506.0	506.0	1.000
NON CV-R	277.0	277.0	1.000	584.0	584.0	1.000	766.0	766.0	1.000
CANCER	239.5	239.5	1.000	482.8	482.8	1.000	753.5	753.5	1.000
	1.155	1.155	1.000	1.210	1.210	1.000	1.017	1.017	1.000
	57.0	57.0	1.000	171.0	171.0	1.000	259.0	259.0	1.000
	64.4	64.4	1.000	135.9	135.9	1.000	224.5	224.5	1.000
	0.885	0.885	1.000	1.258	1.258	1.000	1.153	1.153	1.000

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS						CODE					
	1949	1950	1959	1960	1961	1969	1970	1971	1971	1971	1971	1971	STATE	1950 RANK BY POPULATION	1950 RANK BY POPULATION	1950 RANK BY POPULATION	1950 RANK BY POPULATION	1950 RANK BY POPULATION
TOTAL	280	204	356	344	348	494	484	503	503	503	503	503	LOUISIANA	365	365	365	365	365
GENERAL	126	81	162	143	159	230	238	247	247	247	247	247	5006	1950 POP/SQ. MILE	1950 POP/SQ. MILE	1950 POP/SQ. MILE	1950 POP/SQ. MILE	1950 POP/SQ. MILE
HEART	120	120	194	145	106	162	166	178	178	178	178	178	3445	1940 POP/SQ. MILE	1940 POP/SQ. MILE	1940 POP/SQ. MILE	1940 POP/SQ. MILE	1940 POP/SQ. MILE
NON CV-R	133	123	194	201	189	264	246	256	256	256	256	256	2455	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME
CANCER	33	24	57	59	55	98	82	79	79	79	79	79	8089	URBAN CLASS AREA RANK	URBAN CLASS AREA RANK	URBAN CLASS AREA RANK	URBAN CLASS AREA RANK	URBAN CLASS AREA RANK
													INDEPENDENT	1950 MED. FAM. INCOME	1950 MED. FAM. INCOME	1950 MED. FAM. INCOME	1950 MED. FAM. INCOME	1950 MED. FAM. INCOME
													53	URBAN CLASS AREA RANK	URBAN CLASS AREA RANK	URBAN CLASS AREA RANK	URBAN CLASS AREA RANK	URBAN CLASS AREA RANK
													82	1950 MED. FAM. INCOME	1950 MED. FAM. INCOME	1950 MED. FAM. INCOME	1950 MED. FAM. INCOME	1950 MED. FAM. INCOME
													59	JURY MEN TEMPERATURE	JURY MEN TEMPERATURE	JURY MEN TEMPERATURE	JURY MEN TEMPERATURE	JURY MEN TEMPERATURE
													59	MEAN ANNUAL PRECIPITATION	MEAN ANNUAL PRECIPITATION	MEAN ANNUAL PRECIPITATION	MEAN ANNUAL PRECIPITATION	MEAN ANNUAL PRECIPITATION
													0	LAND RESOURCE REGION	LAND RESOURCE REGION	LAND RESOURCE REGION	LAND RESOURCE REGION	LAND RESOURCE REGION
													GROUND	WATER SOURCE	WATER SOURCE	WATER SOURCE	WATER SOURCE	WATER SOURCE
													95 PPM	TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS
													6 PPM	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS
														FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS
														NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	430	369	170	197	812	720	244	217	503	491	283	255
1-4	1469	1418	616	568	2750	2724	858	839	1897	1661	1099	1077
5-9	1351	1385	562	549	2869	2817	921	874	2715	2651	1595	1585
10-14	1116	1080	482	489	2342	2294	717	688	2917	2806	1721	1629
15-19	941	1087	391	512	1588	2001	487	534	2685	2870	1350	1407
20-24	1224	1463	451	633	1833	2124	464	545	2240	2616	780	985
25-29	1455	1556	476	569	2028	1914	433	504	1803	1818	585	736
30-34	1334	1311	441	436	1851	1964	416	569	1425	1481	562	741
35-39	1314	1198	387	476	1855	1967	424	444	1382	1548	570	770
40-44	1109	1068	319	312	1706	1549	351	390	1591	1764	672	782
45-49	887	887	326	285	1374	1332	342	387	1578	1764	576	606
50-54	671	620	232	246	1088	1091	254	254	1459	1515	473	531
55-59	488	481	214	171	788	873	240	208	1213	1272	417	489
60-64	324	413	153	145	565	605	140	180	928	1074	303	358
65-69	254	299	153	172	373	469	155	175	628	849	287	266
70-74	186	247	68	65	231	374	100	133	437	627	155	223
75-79*	141	228	63	56	141	245	71	88	240	461	126	130
80-84*	0	0	0	0	94	146	31	31	120	300	67	92
85-UP	30	31	14	14	40	98	33	16	81	178	43	84
TOTALS	14724	15141	5518	5889	24328	25307	6681	7076	25842	27746	11664	12746
GRAND TOTAL				41272				63392				77998

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*
TOTAL	655.0	575.5	1347.0	1289.7	1802.0	1770.3
CV-PENAL	295.0	265.4	629.0	598.2	912.0	1028.3
HEART	221.0	183.6	447.0	415.1	648.0	706.1
NON CV-R	360.0	310.2	718.0	691.5	890.0	942.0
CANCER	89.0	82.5	189.0	183.0	305.0	291.6

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1961				1969				1971			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	338	317	655	655	471	442	434	1347	556	625	621	1802	556	625	621	1802	621	625	621	1802
CV-PENAL	141	154	295	295	211	208	210	629	210	290	310	912	210	290	310	912	310	312	312	912
HEART	109	112	221	221	155	143	149	447	199	225	224	648	199	225	224	648	224	225	224	648
NON CV-R	197	163	360	360	260	234	224	718	266	315	309	890	266	315	309	890	309	315	309	890
CANCER	50	39	89	89	59	55	75	189	97	105	103	305	97	105	103	305	103	105	103	305

CITY CHARACTERISTICS

STATE	LOUISIANA	
	1950 RANK BY POPULATION	1971 RANK BY POPULATION
1950 POP/50. MILE	291	2358
1970 POP/50. MILE	3391	3391
1949 MED. FAM. INCOME	3234	3234
1969 MED. FAM. INCOME	8297	8297
URBAN CLASS	INDEPENDENT	INDEPENDENT
1950 URBAN AREA RANK	52	52
JAN MEAN TEMPERATURE	82	82
JULY MEAN TEMPERATURE	57	57
MEAN ANN. PRECIPITATION	T	T
LAND RESOURCE REGION	GROUND	GROUND
WATER SOURCE	109 PEM	109 PEM
TOTAL HARDNESS	0 PEM	0 PEM
NON-CARBONATE HARDNESS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL
FLUORIDATION STATUS		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	MM	NP	WM	WF	MM	NP	WM	WF	MM	NP
TOTAL	237	201	255	239	387	358	391	367	295	305	269	296
1-4	955	893	842	855	1309	1303	1392	1294	1098	992	1057	1046
5-9	879	846	798	783	1489	1399	1588	1607	1824	1418	1256	1283
10-14	705	738	624	636	1277	1264	1221	1260	1424	1447	1438	1311
15-19	601	767	494	568	1050	1218	814	862	1961	2146	1317	1334
20-24	836	1180	584	798	1092	1197	512	726	2237	2156	552	781
25-29	986	1103	584	728	929	1013	466	720	1156	1095	403	597
30-34	889	911	523	728	990	1037	514	799	870	948	322	490
35-39	820	897	538	721	1010	1078	525	701	804	927	346	565
40-44	721	829	511	644	879	949	478	679	879	1030	392	630
45-49	713	775	487	621	825	913	510	653	919	1001	399	556
50-54	608	649	428	389	683	801	495	591	749	956	388	546
55-59	449	494	303	321	622	717	473	585	603	870	401	510
60-64	383	367	267	247	471	631	343	406	607	807	387	551
65-69	286	346	277	359	400	511	342	397	484	713	374	543
70-74	218	206	117	134	300	399	212	306	336	564	250	323
75-79*	142	201	120	158	185	253	183	152	246	404	154	218
80-84*	0	0	0	0	106	142	66	86	132	260	77	114
85-UP	17	32	28	37	42	86	60	83	85	156	74	93
TOTALS	10445	11435	7670	9022	14007	15323	10575	12274	16536	18195	9856	11787
GRAND TOTAL				38572				52219				56374

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL					828.0	1675.0			828.0	1870.0		
					681.2	1544.0			681.2	1799.0		
					1.216	1.085			1.216	1.039		
CV-RENAL												
					437.0	879.0			437.0	1043.0		
					333.4	784.5			333.4	985.8		
					1.311	1.120			1.311	1.058		
HEART												
					309.0	587.0			309.0	766.0		
					225.9	527.9			225.9	661.6		
					1.368	1.112			1.368	1.158		
NON CV-R												
					391.0	796.0			391.0	827.0		
					347.8	758.5			347.8	811.2		
					1.124	1.048			1.124	1.017		
CANCER												
					96.0	233.0			96.0	280.0		
					98.3	216.4			98.3	256.0		
					0.977	1.077			0.977	1.133		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	
	LOUISIANA	
STATF	1950 RANK BY POPULATION	310
1950 POP/SQ. MILE	2366	
1970 POP/SQ. MILE	2539	
1949 MED. FAM. INCOME	2408	
1969 MED. FAM. INCOME	6706	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	48	
JULY MEAN TEMPERATURE	82	
MEAN ANN. PRECIPITATION	54	
LAND RESOURCE REGION	0	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	36 PPM	
NON-CARBONATE HARDNESS	20 PPM	
FLOODPLAIN STATUS	NO ARTIFICIAL, LOW NATURAL	

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50 ^a	1959-61	1969-71
TOTAL			
OBSERVED	12325.0	21571.0	21974.0
EXPECTED*	9951.3	18766.4	19948.4
OBS/EXP	1.239	1.149	1.102
CV-RENAL			
OBSERVED	6413.0	11215.0	11313.0
EXPECTED*	5042.6	9739.3	1028.9
OBS/EXP	1.272	1.152	1.026
HEART			
OBSERVED	4714.0	8357.0	8359.0
EXPECTED*	3490.0	6702.2	7477.2
OBS/EXP	1.351	1.247	1.118
NON CV-R			
OBSERVED	5912.0	10355.0	10661.0
EXPECTED*	4908.7	9027.2	8919.6
OBS/EXP	1.204	1.147	1.195
CANCER			
OBSERVED	1844.0	3467.0	3789.0
EXPECTED*	1518.4	2803.0	2942.3
OBS/EXP	1.214	1.237	1.288

* * SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE
STATE	LOUISIANA
1950 BANK BY POPULATION	16
1950 POP/50. MILE	2861
1970 POP/50. MILE	3011
1969 MED. FAM. INCOME	2767
1969 MED. FAM. INCOME	7445
URBAN CLASS.	CENTRAL
1950 URBAN AREA RANK	19
JAN MEAN TEMPERATURE	55
JULY MEAN TEMPERATURE	83
MEAN ANNUAL PRECIPITATION	63
LAND RESOURCE REGION	T
WATER SOURCE	SURFACE
TOTAL HARDNESS	74 PPM
NON-CARBONATE HARDNESS	44 PPM
FLOIDATION STATUS	NO ARTIFICIAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	3749	3660	2413	2355	4096	3916	3671	3703	2271	2145	2712	2764
-4	1520	1994	9066	8757	14725	14248	13868	13444	8337	8050	42148	12232
5-9	14384	13997	8581	8653	17130	16723	15405	15060	11655	11506	16646	16616
10-14	10712	10783	6881	7166	16105	15927	11555	11872	13221	12965	17150	16879
15-19	11073	11998	5908	7026	12987	12488	8355	9172	14131	14335	40083	45103
20-24	15794	17339	6326	8314	11380	13199	6378	8201	11380	14809	9102	12587
25-29	17928	18229	7086	8652	11449	11163	6316	7874	11011	10249	7334	9477
30-34	15052	15588	5927	7468	12417	13333	6551	8357	7534	7512	5953	7998
35-39	14731	16050	6427	8148	13737	14882	6996	8427	7150	7772	5550	7599
40-44	14233	15807	6074	7336	12635	13835	5961	6961	9091	10478	5931	7683
45-49	13129	13992	5712	6624	12681	13770	5801	6744	10557	11886	6091	7448
50-54	11734	12608	4612	4788	11109	12412	4924	5471	9458	11140	5065	6270
55-59	9287	10222	3407	3692	10929	10371	3334	3815	9100	10995	4694	5580
60-64	7029	8322	2384	2492	8574	8878	2809	3413	8115	10880	4332	5412
65-69	5293	7272	1211	3103	6574	6632	1810	2417	6535	9639	3576	4742
70-74	3331	5086	1074	1481	2485	4477	1001	1595	4680	7657	2238	2942
75-79*	2838	5225	996	1308	2485	4477	1001	1595	3701	5203	1191	1805
80-84*	C	0	0	0	121	2460	379	696	1332	3094	650	1044
85-89*	351	837	113	311	588	1460	263	495	792	1971	439	935
TOTALS	185858	201956	84954	97677	186650	205944	110880	124051	151134	172286	124835	145216
TOTALS				570445				627525				593471

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949		1950		40-50		1959		1960		59-61		1969		1970		69-71		
		SUM		SUM		SUM		SUM		SUM		SUM		SUM		SUM		SUM	
TOTAL	6156		6169		12325		7121		7454		6996		21571		7475		7364		21974
CV-RENAL	3192		3192		4714		3587		3947		3681		11215		3845		3824		11313
H-HEART	2384		2330		4714		2659		2756		2756		2850		2866		2643		8359
NON CV-R	2935		2977		5912		3534		3607		3315		10356		3630		3491		10661
CANCER	918		926		1844		1198		1129		1140		3467		1261		1281		3789

LAND RESOURCE REGION	T
WATER SOURCE	SURFACE
TOTAL HARDNESS	74 PPM
NON-CARBONATE HARDNESS	44 PPM
FLUORIDATION STATUS	NO ARTIFICIAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970				NP
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	
LT 1	1023	979	599	560	1276	1167	896	865	1021	934	737	746	
1-4	3769	3587	2139	2161	4609	4618	3223	3230	3559	3466	2732	2760	
5-9	3143	3215	2045	1976	5498	5394	3974	3871	5510	5154	3621	3641	
10-14	2470	2476	1618	1669	4695	4669	2965	2997	5745	5567	3814	3808	
15-19	2111	2818	1303	1604	3007	3823	2081	2097	5158	5370	3316	3609	
20-24	3327	4449	1420	2203	2908	4021	1521	2086	3983	4922	2012	2643	
25-29	4152	4470	1491	1985	5488	3730	1432	1952	3871	4160	1548	1928	
30-34	3741	3831	1295	1824	3878	4156	1433	2064	3312	3539	1326	1781	
35-39	3333	3598	1380	1859	3918	4203	1384	1852	3213	3559	1257	1743	
40-44	2984	3296	1209	1496	3531	3832	1293	1741	3767	4164	1273	1858	
45-49	2626	2888	1225	1466	3297	3435	1232	1554	3812	4200	1188	1594	
50-54	2323	2404	968	1157	2767	3188	1076	1432	3332	3655	1153	1581	
55-59	1783	1947	745	794	2399	2880	1107	1368	2865	3324	1110	1360	
60-64	1321	1494	480	560	1860	2303	842	1032	2365	3272	975	1306	
65-69	1007	1271	677	931	1553	1981	787	1047	1814	2727	950	1396	
70-74	652	903	298	358	1010	1487	505	684	1298	2074	678	943	
75-79#	550	785	286	364	656	989	366	474	887	1533	447	638	
80-84#	0	0	0	0	308	571	143	208	446	973	213	325	
85-UP	91	147	59	98	190	358	125	190	278	680	219	346	
TOTALS	40406	44558	19237	23005	50848	56805	26075	30644	56236	63253	28569	34006	
GRAND TOTAL				127206				164372				182064	

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS						CODE					
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS
TOTAL	1175	1277	2452	1577	1744	1607	4928	1086	1030	1870	5780	LOUISIANA	80	5300	3200	2942	8485	CENTRAL
CV-RENAL	546	623	1169	809	872	803	2484	1066	1030	987	3103	1950 RANK BY POPULATION	80	5300	3200	2942	8485	CENTRAL
HEART	351	428	779	587	615	542	1744	782	717	674	2173	1950 POP./SQ. MILE	80	5300	3200	2942	8485	CENTRAL
NON CV-R	629	654	1283	768	872	804	2444	874	920	883	2677	1949 MED. FAM. INCOME	2942	8485	1969 MED. FAM. INCOME	8485	1969 MED. FAM. INCOME	CENTRAL
CANCER	156	171	327	234	264	252	750	317	337	315	969	URBAN CLASS	82	82	1950 URBAN AREA RANK	47	47	47
												JAN MEAN TEMPERATURE	47	47	JAN MEAN TEMPERATURE	47	47	47
												JULY MEAN TEMPERATURE	83	83	JULY MEAN TEMPERATURE	83	83	83
												MEAN ANN. PRECIPITATION	45	45	MEAN ANN. PRECIPITATION	45	45	45
												LAND RESOURCE REGION	P	P	LAND RESOURCE REGION	P	P	P
												WATER SOURCE	SURFACE	SURFACE	WATER SOURCE	SURFACE	SURFACE	SURFACE
												TOTAL HARDNESS	68 PPM	68 PPM	TOTAL HARDNESS	68 PPM	68 PPM	68 PPM
												NON-CARBONATE HARDNESS	35 PPM	35 PPM	NON-CARBONATE HARDNESS	35 PPM	35 PPM	35 PPM
												FLUORIDATION STATUS	NO ARTIFICIAL	NO ARTIFICIAL	FLUORIDATION STATUS	NO ARTIFICIAL	NO ARTIFICIAL	NO ARTIFICIAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE
LT 1	316	302	5	3	477	522	23	16	290	263	3	4
1-4	1204	1241	16	6	1766	1678	55	52	1089	1007	27	17
5-9	1131	1080	10	12	1702	1703	28	35	1488	1491	39	33
10-14	930	1010	5	8	1509	1490	17	27	1468	1489	27	35
15-19	967	1106	18	11	1595	1286	39	14	1604	1580	20	21
20-24	1199	1363	10	15	1956	1455	132	40	1854	1747	48	16
25-29	1240	1217	12	6	1534	1239	94	59	1037	1007	22	19
30-34	1011	1069	14	6	1247	1204	41	32	725	840	15	20
35-39	1041	1102	6	5	1256	1214	22	15	739	834	15	16
40-44	938	1098	8	7	1084	1027	16	8	783	900	13	19
45-49	945	988	8	7	930	1014	7	4	830	866	13	6
50-54	905	1030	8	5	851	999	8	2	740	862	8	5
55-59	832	958	7	5	802	877	6	6	687	840	7	3
60-64	729	770	7	6	687	860	3	3	603	870	7	5
65-69	624	721	5	2	614	767	8	4	519	693	4	7
70-74	429	568	3	1	456	652	6	7	415	589	2	0
75-79*	404	651	4	1	350	447	4	0	288	548	1	4
80-84*	0	0	0	0	183	257	0	2	166	405	3	5
85-UP	73	115	2	2	109	225	2	1	148	250	2	2
TOTALS	14918	16389	151	100	19108	18966	511	327	15473	17182	276	237
GRAND TOTAL				31558				38912				33168

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH PATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBSERVED	EXPECTED*
TOTAL	761.0	695.3	1.095	0.961	1188.0	1129.0
CV-RENAL	412.0	401.2	1.027	1.018	719.0	638.0
HEART	292.0	284.9	1.025	0.989	490.0	507.0
NON CV-R	349.0	294.0	1.187	0.885	469.0	474.8
CANCER	136.0	111.4	1.221	0.894	170.0	0.956

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				69-71	
	1949	1950	1959	1961	1971	SUM
TOTAL	410	351	395	413	396	1129
CV-RENAL	229	183	250	228	220	638
HEART	163	129	171	152	150	461
NON CV-R	181	168	145	139	176	491
CANCER	67	69	54	48	74	170

CITY CHARACTERISTICS

STATE		MAINE	
1950 RANK BY POPULATION	381	1950 RANK BY POPULATION	381
1950 POP/SQ. MILE	977	1970 POP/SQ. MILE	977
1949 MED. FAM. INCOME	2908	1949 MED. FAM. INCOME	2908
URBAN CLASS	8014	1950 URBAN AREA RANK	17
JAN MEAN TEMPERATURE	39	JULY MEAN TEMPERATURE	70
MEAN ANN. PRECIPITATION	39	LAND RESOURCE REGION	R
WATER SOURCE	36 PPM	TOTAL HARDNESS	36 PPM
NON-CARBONATE HARDNESS	28 PPM	FLUORIDATION STATUS	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NE	NF		WM	WF	NM	NF		
LT 1	484	442	1	0	0		423	387	0	0		
1-4	1720	1605	1	0	0		1529	1604	1	0		
5-9	1657	1624	0	3	0		1959	1923	3	0		
10-14	1484	1446	6	3	3		1861	1844	3	3		
15-19	1524	1830	1	1	2		1480	1753	2	2		
20-24	1499	1824	5	6	3		1248	1421	6	3		
25-29	1578	1660	2	2	0		1097	1136	2	0		
30-34	1361	1550	2	0	2		1123	1280	1	2		
35-39	1381	1520	0	1	2		1202	1332	0	2		
40-44	1270	1433	1	1	3		1359	1316	2	3		
45-49	1253	1402	1	2	0		1113	1299	1	4		
50-54	1109	1289	1	1	0		1043	1301	0	2		
55-59	711	912	1	1	0		876	1074	0	1		
60-64	580	661	1	0	1		708	915	1	1		
65-69	498	525	0	0	0		535	717	0	0		
70-74	373	517	0	1	0		310	448	1	0		
75-79	0	0	0	0	1		141	249	1	1		
80-84	0	0	0	0	0		78	135	0	0		
85-UP	62	98	0	0	0		19190	21566	24	24		
TOTALS	19478	21449	23	24	24		19388	22213	87	91		
GRAND TOTAL			40574		40804							

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	301
HEART	146	156	302	186	212	181	212	204	185	204	234	242
NON CV-R	218	170	368	555	187	144	187	194	284	194	205	171
CANCER	76	63	139	241	81	72	81	72	88	94	90	82

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	1959-50	59-61	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	430	409	839	59-61	466	421	466	421	434	467	479	472
CV-RENAL	212	239	951	1321	279	279	279	273	250	273	274	

PORTLAND
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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
1T-1	750	719	6	4	766	771	10	3	537	518	9	6
1-4	2959	2764	8	16	2772	2774	22	17	2071	2021	28	25
5-9	2959	2805	7	14	3255	3174	21	27	2817	2776	51	46
10-14	2434	2443	15	20	3129	3057	19	25	3036	2902	29	33
15-19	2381	3047	18	16	3217	3001	12	28	2584	3236	21	21
20-24	2467	3177	34	14	1683	2142	14	10	2194	2993	17	24
25-29	2756	3017	25	15	1801	1949	23	13	1813	1904	26	33
30-34	2521	2823	9	14	1944	2180	27	15	1337	1422	19	22
35-39	2562	2860	10	12	2093	2344	18	18	1399	1598	23	13
40-44	2481	2787	13	5	2031	2407	8	15	1621	1898	19	20
45-49	2196	2519	17	9	2049	2424	15	10	1736	2018	14	13
50-54	2213	2558	17	7	2001	2372	12	9	1679	1987	12	14
55-59	1938	2316	11	12	1793	2148	7	8	1591	1875	12	14
60-64	1757	2006	11	11	1588	2044	9	7	1419	1950	7	9
65-69	1486	1897	4	4	1386	1981	8	7	1156	1743	6	12
70-74	1055	1464	5	6	1190	1623	11	12	947	1639	10	8
75-79*	1056	1586	2	5	739	1274	1	4	646	1298	3	5
80-84*	0	0	0	0	418	751	3	0	434	792	1	6
85-UP	162	325	0	1	220	503	1	2	243	651	2	2
TOTALS	36133	41113	205	183	33176	38919	241	230	29260	35221	309	326
GRAND TOTAL			77634				72566				65116	

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1818.0	3031.0	2708.0		1721.2	2782.1	2680.9		1.056	1.089	1.010	
CV-RENAL	1022.0	1797.0	1543.0		999.0	1660.8	1651.0		1.023	1.082	0.935	
HEART	745.0	1316.0	1153.0		708.2	1164.4	1143.4		1.052	1.130	1.008	
NON CV-R	796.0	1234.0	1165.0		722.2	1121.3	1029.9		1.102	1.101	1.131	
CANCER	307.0	501.0	472.0		276.4	431.0	400.5		1.111	1.162	1.179	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	49-50	59-61	1969	1970	1971	59-71
TOTAL	937	881	1818	SUM	885	949	874	2708
CV-RENAL	520	502	1022	3031	501	543	486	1543
HEART	377	368	745	1316	371	391	388	1143
NON CV-R	417	379	796	1234	371	406	388	1165
CANCER	154	153	307	501	138	153	181	472

STATE		MAINE	
1950 BANK BY POPULATION	148	1950 POP/SQ. MILE	3594
1970 POP/SQ. MILE	3015	1949 MED. FAM. INCOME	2980
1969 MED. FAM. INCOME	8456	URBAN CLASS	CENTRAL
1950 URBAN AREA BANK	109	JAN MEAN TEMPERATURE	20
JULY MEAN TEMPERATURE	67	MEAN ANN. PRECIPITATION	41
LAND RESOURCE REGION	R	WATER SOURCE	SURFACE
TOTAL HARDNESS	14 PPM	NON-CARBONATE HARDNESS	7 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL		

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
-------	---------	---------	---------

TOTAL	21391.0	33949.0	34017.0
OBSERVED	16597.2	28380.4	31073.6
EXPECTED*			
OBS/EXP	1.289	1.196	1.095

CV-RENAL	11560.0	18331.0	16864.0
OBSERVED	8620.8	14983.3	17215.6
EXPECTED*			
OBS/EXP	1.341	1.232	0.980

HEART	8871.0	14402.0	13288.0
OBSERVED	6066.1	10358.2	11711.1
EXPECTED*			
OBS/EXP	1.462	1.390	1.135

NON CV-R	9831.0	15618.0	17153.0
OBSERVED	7976.4	13497.9	13857.9
EXPECTED*			
OBS/EXP	1.233	1.157	1.238

CANCER	3162.0	5513.0	5966.0
OBSERVED	2611.7	4425.8	4581.3
EXPECTED*			
OBS/EXP	1.211	1.274	1.302

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	MARYLAND
1950 BANK BY POPULATION	6
1950 POP/SQ. MILE	12067
1970 POP/SQ. MILE	11568
1949 MED. FAM. INCOME	3275
1969 MED. FAM. INCOME	8815
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	12
JAN MEAN TEMPERATURE	36
JULY MEAN TEMPERATURE	78
MEAN ANN. PRECIPITATION	42
LAND RESOURCE REGION	S
WATER SOURCE	SURFACE
TOTAL HARDNESS	50 PPM
NON-CARBONATE HARDNESS	10 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

1960

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

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AGE GROUP

IT 1-4

5-9

10-14

15-19

20-24

25-29

30-34

35-39

40-44

45-49

50-54

55-59

60-64

65-69

70-74

75-79#

80-84#

85-UP

TOTALS

GRAND TOTAL

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

1960

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

1950

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

WM WF NM NF

CAUSE

TOTAL

CV-RENAL

HEART

NON CV-R

CANCER

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					1960					1970				
	WM	FF	NM	NE	NP	WM	WF	NM	NP	NF	WM	WP	NM	NP	NF
LT-1	293	325	4	11	10	306	290	10	10	6	182	218	14	31	6
1-4	1392	1373	42	56	38	1139	1064	41	38	31	771	723	35	44	43
5-9	1398	1365	45	49	61	1262	1347	70	61	44	1123	1088	44	44	43
10-14	1282	1250	51	38	49	1408	1412	48	66	50	1234	1207	50	50	41
15-19	1111	1315	34	29	34	1013	1243	37	49	53	1114	1208	63	53	53
20-24	1152	1502	30	42	17	725	895	26	17	34	806	1040	37	34	26
25-29	1325	1488	47	41	21	800	856	16	21	22	725	737	34	26	22
30-34	1254	1452	29	38	33	929	1053	21	33	22	588	674	16	22	22
35-39	1306	1431	40	38	31	972	1159	39	31	26	602	725	17	26	26
40-44	1298	1414	27	29	42	994	1145	24	42	28	859	977	23	28	28
45-49	1202	1380	40	29	20	1008	1167	32	20	31	878	1026	34	31	31
50-54	1181	1212	29	34	19	1009	1202	16	19	33	854	1054	14	33	33
55-59	897	1047	22	25	17	960	1145	22	17	19	842	1065	11	19	19
60-64	783	874	15	19	31	858	966	18	31	17	765	1071	16	17	17
65-69	591	762	13	13	16	624	877	21	16	17	661	924	16	17	17
70-74	433	553	16	9	16	525	675	7	16	22	517	781	13	22	22
75-79*	389	527	9	11	8	313	477	8	8	8	297	580	6	10	10
80-84*	0	0	0	0	5	153	271	6	5	6	170	367	7	6	6
85-UP	44	70	0	2	1	70	134	3	1	5	116	217	7	5	5
TOTALS	17331	19340	493	515	504	15068	17378	465	504	469	13104	15682	469	469	469
GRAND TOTAL				37679	33415					29724					

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	877.0	877.0	1.000	1413.0	1413.0	1.000	1408.0	1408.0	1.000
CV-RENAL	530.0	530.0	1.000	903.0	903.0	1.000	858.0	858.0	1.000
HEART	382.0	382.0	1.000	678.1	678.1	1.000	774.8	774.8	1.000
NON CV-R	347.0	347.0	1.000	510.0	510.0	1.000	550.0	550.0	1.000
CANCER	367.7	367.7	1.000	496.0	496.0	1.000	496.0	496.0	1.000
	1.128	1.128		1.039	1.039		1.109	1.109	
	120.0	120.0		221.0	221.0		244.0	244.0	
	116.4	116.4		194.3	194.3		199.8	199.8	
	1.031	1.031		1.149	1.149		1.221	1.221	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					OBSERVED DEATHS BY CAUSE AND YEAR				
	1949	1950	1959	1960	1961	1969	1970	1971	SUM	69-71 SUM
TOTAL	441	436	480	469	464	474	480	454	1408	1408
CV-RENAL	252	278	313	293	297	303	281	274	858	858
HEART	170	212	239	233	218	239	232	221	692	692
NON CV-R	189	158	167	176	167	171	199	180	550	550
CANCER	65	55	72	70	79	68	90	86	244	244

CITY CHARACTERISTICS

CODE

STATE	MARYLAND
1950 RANK BY POPULATION	318
1950 POP/50. MILE	4769
1970 POP/50. MILE	3716
1949 MED. FAM. INCOME	2960
1969 MED. FAM. INCOME	2782
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	31
JAN MEAN TEMPERATURE	74
JULY MEAN TEMPERATURE	74
MEAN ANN. PRECIPITATION	34
LAND RESOURCE REGION	N
WATER SOURCE	SURFACE
TOTAL HARDNESS	36 PPM
NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM		NM		WM		NM		WM		NM	
	WF	MF	WF	MF	WF	MF	WF	MF	WF	MF	WF	MF
TOTAL	13560	15266	36	22	17060	18947	48	53	17769	20302	130	147
GRAND TOTAL			28884									

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP
TOTAL	565.0	1044.0	0.532	0.994	0.833	0.833
CV-RENAL	343.0	617.0	0.556	1.041	0.726	0.726
HEART	254.0	463.0	0.549	1.103	0.751	0.751
NON CV-R	222.0	427.0	0.520	0.934	0.987	0.987
CANCER	94.0	175.0	0.537	1.066	1.097	1.097

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	296	269	565	1044	330	323	334	987
CV-RENAL	176	167	343	617	172	177	177	526
HEART	130	124	254	463	115	120	133	368
NON CV-R	120	102	222	427	170	151	157	478
CANCER	49	45	94	175	62	68	70	200

MASSACHUSETTS		CODE	
STATE	425	1950 RANK BY POPULATION	1913
1950 POP/SQ. MILE	2574	1970 POP/SQ. MILE	3417
1949 MED. FAM. INCOME	11252	1969 MED. FAM. INCOME	11252
URBAN CLASS	27	URBAN CLASS	27
1950 MEDIAN AGE	27	1950 MEDIAN AGE	27
JAN. MEAN TEMPERATURE	37	JAN. MEAN TEMPERATURE	37
MEAN ANNUAL PRECIPITATION	37	MEAN ANNUAL PRECIPITATION	37
LAND RESOURCE REGION	54	LAND RESOURCE REGION	54
WATER SOURCE	47	WATER SOURCE	47
TOTAL HARDNESS	54	TOTAL HARDNESS	54
NON-CARBONATE HARDNESS	47	NON-CARBONATE HARDNESS	47
FLUORIDATION STATUS	1952	FLUORIDATION STATUS	1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	6444	6168	485	472	6322	6025	1077	1048	3795	3537	1415	1362
1-4	27652	26232	1800	1785	22456	21543	3737	3811	14282	13598	5890	6048
5-9	27932	26763	1553	1574	24029	22874	3835	4032	18567	17851	7684	7605
10-14	23417	22762	1409	1288	22711	22085	2924	3060	19613	18566	6312	6567
15-19	25449	26212	1262	1333	23102	24594	1960	2261	23247	26981	5035	5801
20-24	32801	32652	1852	1983	24772	24591	2374	2743	28728	37283	4486	6621
25-29	31555	31339	2333	2373	21528	18996	2605	2730	19347	18682	4283	5613
30-34	27186	29020	1972	1541	19020	18462	2660	2890	12209	11801	3319	4125
35-39	25318	29129	1789	1829	18151	19111	2714	2731	11298	11331	2923	3556
40-44	24255	27364	1380	1350	17292	19903	2106	2181	12392	13322	2624	3289
45-49	22562	25457	1302	1281	17625	21140	1746	1772	12732	14557	2570	2947
50-54	22546	25030	1241	1095	17735	21030	1331	1391	12691	15616	2078	2282
55-59	20668	22072	950	877	17146	20408	1212	1232	12373	16431	1483	1809
60-64	17329	18623	693	671	15429	19235	1122	1012	11962	16256	1083	1454
65-69	13567	16902	660	683	13459	17174	760	838	9949	14752	957	1233
70-74	8629	11989	389	407	10114	13349	576	634	7648	13182	765	983
75-79	8131	12678	266	382	6276	8895	388	420	5535	9333	437	628
80-84	0	0	0	0	2711	4924	194	209	3159	6030	247	379
85-UP	1154	2113	49	75	1459	3014	99	138	1979	4104	153	316
TOTALS	366795	391905	21385	21359	301347	327357	33360	35133	241496	283213	53744	62618
GRAND TOTAL				801444				637197				641071

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1970				1971				1972			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	9621	9167	18788	18788	8914	8812	9191	27917	8314	8143	8099	24556	8314	8143	8099	24556	8314	8143	8099	24556	8314	8143	8099	24556
CV-RENAL	5073	4918	9991	9991	4856	4584	4958	15098	4130	3924	3855	11909	4130	3924	3855	11909	4130	3924	3855	11909	4130	3924	3855	11909
HEART	3759	3683	7442	7442	3583	3487	3735	11205	3201	3046	3023	9270	3201	3046	3023	9270	3201	3046	3023	9270	3201	3046	3023	9270
NON CV-R	4548	4249	8797	8797	4658	4528	4233	12819	4184	4219	4244	12647	4184	4219	4244	12647	4184	4219	4244	12647	4184	4219	4244	12647
CANCER	1575	1583	3158	3158	1481	1559	1549	4589	1459	1452	1512	4423	1459	1452	1512	4423	1459	1452	1512	4423	1459	1452	1512	4423

CITY CHARACTERISTICS

CODE

STATE	MASSACHUSETTS
1950 RANK BY POPULATION	10
1950 POP/SQ. MILE	16767
1970 POP/SQ. MILE	13936
1949 MED. FAM. INCOME	3249
1969 MED. FAM. INCOME	9133
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	6
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	38
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	12 PPM
NON-CALCAREATE HARDNESS	6 PPM
FLUORIDATION STATUS	NO ARTIFICIAL,LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	518	498	7	6	865	863	28	20
1-4	2366	2293	30	40	3262	3141	86	104
5-9	2427	2396	24	36	3353	3182	67	93
10-14	1787	1769	21	33	2193	2035	47	52
15-19	1787	1697	22	34	1682	1656	52	58
20-24	1783	1697	23	27	1682	1656	42	57
25-29	2169	2167	23	27	2173	2117	47	43
30-34	2169	2167	23	27	2276	2293	47	43
35-39	2191	2272	27	26	2415	2430	39	46
40-44	1930	2172	10	16	2316	2328	35	39
45-49	1673	2011	11	11	2176	2197	35	24
50-54	1794	2126	11	6	1821	2005	12	27
55-59	1863	2115	12	18	1502	1872	15	18
60-64	1712	1883	8	13	1495	1856	15	12
65-69	1338	1594	10	8	1449	1855	14	17
70-74	531	1290	7	7	1181	1572	7	14
75-79*	1639	1283	5	8	747	1627	13	10
80-84*	6	0	0	0	317	605	5	3
85-UP	133	294	0	0	219	370	2	5
TOTALS	29550	32673	295	342	34448	37098	605	662
GRAND TOTAL				62860				72813

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1598.6	1507.5	1.060	2809.0	2567.7	1.097	2805.0	2305.0	1.217
CV-KIDNEY	962.0	1631.0	0.589	1631.0	1574.0	1.036	1574.0	1731.9	0.909
HEART	658.0	1153.0	0.571	1153.0	1207.3	0.955	1207.3	1097.9	1.100
NON CV-R	636.6	620.3	1.025	1178.0	1072.8	1.098	1271.0	1208.0	1.052
CANCER	261.0	244.4	1.068	436.0	396.6	1.094	528.0	440.3	1.199

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1961				1971			
	1949	1950	1951	1952	1961	1962	1963	1964	1971	1972	1973	1974
TOTAL	781	817	817	817	931	931	931	931	897	897	897	897
CV-KIDNEY	476	486	486	486	559	559	559	559	466	466	466	466
HEART	326	332	332	332	390	390	390	390	358	358	358	358
NON CV-R	305	331	331	331	409	409	409	409	431	431	431	431
CANCER	120	141	141	141	153	153	153	153	177	177	177	177

CITY CHARACTERISTICS

STATE	MASSACHUSETTS	
	191	191
1950 POP/SQ. MILE	2937	2937
1970 POP/SQ. MILE	4200	4200
1949 MED. FAM. INCOME	3109	3109
1969 MED. FAM. INCOME	10377	10377
URBAN CLASS	CENTRAL	CENTRAL
1950 URBAN AREA RANK	129	129
JAN MEAN TEMPERATURE	29	29
JULY MEAN TEMPERATURE	71	71
MEAN ANN. PRECIPITATION	39	39
LAND RESOURCE REGION	R	R
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	11 ppm	11 ppm
NON-CARBONATE HARDNESS	4 ppm	4 ppm
FLOODING STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	1020	1073	67	58	966	953	88	71	664	586	91	84
1-4	3999	3964	246	207	3377	3252	302	302	1968	1958	277	281
5-9	3727	3574	201	208	3330	3260	343	301	2332	2287	310	308
10-14	3023	2959	180	168	3028	3064	270	264	2476	2384	325	338
15-19	5053	4055	178	193	5421	3552	265	203	5182	3584	756	383
20-24	7957	5537	278	281	7522	5226	323	235	9560	8509	758	566
25-29	6216	5263	341	313	4590	3640	321	290	5816	5318	556	278
30-34	4106	4361	255	226	3150	2959	297	258	2548	2241	369	288
35-39	3490	3978	175	180	2645	2872	280	279	1841	1722	214	239
40-44	3246	3862	134	147	2353	2910	193	185	1798	1912	201	218
45-49	3010	3590	124	170	2367	2979	122	157	1853	2074	185	255
50-54	2914	3706	118	172	2368	3119	121	157	1693	2248	182	227
55-59	2663	3137	116	161	2232	2992	93	144	1674	2280	110	176
60-64	2233	2729	117	129	2008	2944	125	143	1571	2354	92	153
65-69	1645	2436	91	118	1720	2588	111	146	1302	2210	69	129
70-74	1196	1847	66	74	1316	2079	64	103	935	2038	80	135
75-79*	1087	1919	55	62	800	1391	57	84	668	1478	52	108
80-84*		0	0	0	416	817	29	19	447	970	31	54
85-UP	159	374	9	19	229	614	12	22	255	652	28	39
TOTALS	56754	58314	2792	2680	49778	51151	3416	3371	44603	46805	4486	4467
GRAND TOTAL				120740				107716				100361

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS						CODE
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	MASSACHUSETTS
TOTAL	1288	1227	2515	1236	1233	1235	3704	1078	1016	965	3059	1950 RANK BY POPULATION	86
CV-RENAL												1950 POP/SQ. MILE	19474
HEART												1970 POP/SQ. MILE	16187
NON CV-R												1949 MED. FAM. INCOME	3347
CANCER												1969 MED. FAM. INCOME	3815
												URBAN CLASS	FRIDGE
												1950 URBAN AREA RANK	6
												JAN MEAN TEMPERATURE	29
												JULY MEAN TEMPERATURE	72
												MEAN ANN. PRECIPITATION	38
												LAND RESOURCE REGION	R
												WATER SOURCE	SURFACE
												TOTAL HARDNESS	56 PPM
												NON-CARBONATE HARDNESS	15 PPM
												FLUORIDATION STATUS	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	323	285	2	6	304	320	11	6	267	215	8	8
1-4	1518	1464	14	8	1301	1215	18	27	954	863	43	35
5-9	1559	1492	9	14	1388	1386	17	24	1239	1137	54	48
10-14	1283	1240	15	24	1412	1326	11	21	1228	1207	35	35
15-19	1396	1389	25	14	1255	1203	7	18	1301	1241	43	36
20-24	1646	1473	34	13	1094	1029	23	20	1234	1234	74	41
25-29	1544	1568	14	8	964	922	12	20	957	828	26	27
30-34	1502	1603	5	11	1002	1010	16	9	684	617	32	32
35-39	1508	1483	8	6	1018	1086	21	11	642	704	17	17
40-44	1212	1327	7	7	1088	1208	8	5	776	799	23	16
45-49	1084	1142	6	7	1100	1125	12	9	787	923	21	13
50-54	1099	1126	10	8	927	1076	10	9	901	1057	9	9
55-59	1185	1040	15	11	870	905	11	7	904	1001	8	7
60-64	995	898	10	6	877	917	7	5	726	911	7	13
65-69	707	702	6	1	901	862	2	3	586	787	6	8
70-74	472	418	5	0	629	604	4	5	532	648	5	4
75-79#	408	368	4	2	296	298	2	1	455	433	2	1
80-84#	0	0	0	0	150	141	0	0	232	262	2	0
85-UP	56	72	0	0	70	74	3	1	106	118	1	0
TOTALS	19497	19090	189	136	16646	16707	195	201	14875	14985	415	350
GRAND TOTAL			38912					33749				30625

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	829.0	1283.0	1.174.0	1068.7	1161.7	1.011	1174.0	1174.0	1.000
CV-RENAL	481.0	706.0	608.0	601.3	688.8	0.883	608.0	608.0	1.000
HEART	346.0	548.0	519.0	436.4	472.8	1.064	519.0	519.0	1.000
NON CV-R	348.0	577.0	566.0	467.4	472.8	1.197	566.0	566.0	1.000
CANCER	141.0	240.0	235.0	181.5	185.7	1.265	235.0	235.0	1.000

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1960	1961	SUM		1970	1971	SUM	
TOTAL	432	397	829		429	421	1283		391	392	1174	
CV-RENAL	258	223	481		226	229	706		197	202	608	
HEART	184	162	346		180	173	548		165	175	519	
NON CV-R	174	174	348		203	192	577		194	189	566	
CANCER	68	73	141		95	79	240		78	78	235	

CITY CHARACTERISTICS

STATE	MASSACHUSETTS	
	1950 RANK BY POPULATION	1946
POP/SQ. MILE	14536	14536
1949 MED. F.M. INCOME	3109	3109
1969 MED. F.M. INCOME	8773	8773
URBAN CLASS	FEINCE	FEINCE
1950 URBAN AREA RANK	29	29
JAN MEAN TEMPERATURE	72	72
JULY MEAN TEMPERATURE	72	72
MEAN ANN. PRECIPITATION	38	38
LAND RESOURCE REGION	R	R
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	12 PPM	12 PPM
NON-CARBONATE HARDNESS	6 PPM	6 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

1949-50 1959-61 1969-71

CAUSE

TOTAL

OBSERVED
EXPECTED*
OBS/EXP

699.0
723.4
0.966

1338.0
1386.5
0.965

1642.0
1786.1
0.919

CV-RENAL

OBSERVED
EXPECTED*
OBS/EXP

409.0
376.3
1.087

762.0
724.7
1.051

934.0
1005.7
0.929

HEART

OBSERVED
EXPECTED*
OBS/EXP

325.0
272.8
1.191

581.0
524.0
1.109

712.0
713.6
0.998

NON CV-R

OBSERVED
EXPECTED*
OBS/EXP

290.0
347.1
0.835

576.0
661.8
0.870

708.0
780.4
0.907

CANCER

OBSERVED
EXPECTED*
OBS/EXP

113.0
119.2
0.948

219.0
225.5
0.971

298.0
284.3
1.048

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

MASSACHUSETTS

STATE
1950 RANK BY POPULATION
1970 POP/50.0 MILE
1970 POP/50.0 MILE
1949 MED. FAM. INCOME
1969 MED. FAM. INCOME
URBAN CLASS
1950 URBAN AREA RANK
JAN MEAN TEMPERATURE
JULY MEAN TEMPERATURE
MEAN ANN. PRECIPITATION
LAND RESOURCE REGION
WATER SOURCE
TOTAL HARDNESS
NON-CARBONATE HARDNESS
FLUORIDATION STATUS

69-71
SUM

1971

1970

1969

59-61
SUM

1961

1960

1959

49-50
SUM

1950

1949

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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	936	910	4	3	1027	939	7	8
1-4	4404	4326	7	11	3607	3553	34	32
5-9	4750	4564	10	12	4169	4030	32	32
10-14	3674	3647	25	13	3384	3336	23	21
15-19	3511	3773	10	18	3436	3436	19	18
20-24	3847	4804	23	18	3400	2882	11	26
25-29	4509	4883	12	11	2489	2636	26	31
30-34	4180	4561	12	11	2935	3200	21	24
35-39	4119	3921	14	6	3263	3694	15	17
40-44	3315	3802	13	4	3284	3703	18	15
45-49	3145	3596	14	4	3238	3583	16	11
50-54	2796	3117	12	6	2722	3137	14	5
55-59	2279	2657	9	6	2566	3118	16	8
60-64	1724	2245	5	2	2258	2934	12	4
65-69	1199	1735	2	4	2046	2575	15	7
70-74	1136	1692	2	5	1400	2022	8	6
75-79	0	0	0	4	770	1273	4	2
80-84	0	0	0	0	407	757	0	0
85-UP	152	287	0	1	218	439	0	1
TOTALS	53154	58467	187	135	46634	52744	296	268
GRAND TOTAL				111963			99942	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1970				1971				1972			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	1360	1273	2633	1082	1225	1266	1207	3698	1198	1222	1219	3639	1219	1222	1219	3639	1219	1222	1219	3639	1219	1222	1219	3639
1-4	47	715	2082	1082	732	756	739	2227	690	687	705	2082	705	687	705	2082	705	687	705	2082	705	687	705	2082
5-9	54	538	1667	1082	522	534	523	1579	507	506	512	1525	512	506	512	1525	512	506	512	1525	512	506	512	1525
10-14	54	538	1667	1082	493	510	468	1471	508	535	514	1557	514	535	514	1557	514	535	514	1557	514	535	514	1557
15-19	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
20-24	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
25-29	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
30-34	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
35-39	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
40-44	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
45-49	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
50-54	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
55-59	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
60-64	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
65-69	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
70-74	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
75-79	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
80-84	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
85-UP	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
TOTALS	1360	1273	2633	1082	1225	1266	1207	3698	1198	1222	1219	3639	1219	1222	1219	3639	1219	1222	1219	3639	1219	1222	1219	3639
GRAND TOTAL																								

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1970				1971				1972			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	1360	1273	2633	1082	1225	1266	1207	3698	1198	1222	1219	3639	1219	1222	1219	3639	1219	1222	1219	3639	1219	1222	1219	3639
1-4	47	715	2082	1082	732	756	739	2227	690	687	705	2082	705	687	705	2082	705	687	705	2082	705	687	705	2082
5-9	54	538	1667	1082	522	534	523	1579	507	506	512	1525	512	506	512	1525	512	506	512	1525	512	506	512	1525
10-14	54	538	1667	1082	493	510	468	1471	508	535	514	1557	514	535	514	1557	514	535	514	1557	514	535	514	1557
15-19	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
20-24	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
25-29	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
30-34	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
35-39	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
40-44	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
45-49	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
50-54	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
55-59	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
60-64	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
65-69	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
70-74	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
75-79	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
80-84	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
85-UP	218	231	449	1082	215	233	206	654	190	225	241	656	241	225	241	656	241	225	241	656	241	225	241	656
TOTALS	1360	1273	2633	1082	1225	1266	1207	3698	1198	1222	1219	3639	1219	1222	1219	3639	1219	1222	1219	3639	1219	1222	1219	3639
GRAND TOTAL																								

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	MASSACHUSETTS	
1950 BANK BY POPULATION	92	3303
1950 POP/SQ. MILE	3303	3303
1970 POP/SQ. MILE	2936	2936
1970 MED. FAM. INCOME	2943	2943
1969 MED. FAM. INCOME	8289	8289
1950 URBAN CLASS	CENTRAL	
1950 URBAN AREA RANK	106	106
JAN MEAN TEMPERATURE	29	29
JULY MEAN TEMPERATURE	75	75
MEAN ANNUAL PRECIPITATION	45	45
LAND RESOURCE REGION	R	R
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	15 PPM	15 PPM
NON-CARBONATE HARDNESS	6 PPM	6 PPM
FLUORIDATION STATUS	NO ARTIFICIAL	NO ARTIFICIAL

PITCHBURG
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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE
LT 1	418	413	0	0	483	435	5	11	346	325	10	11
1-4	1710	1660	0	1	1908	1846	25	22	1399	1358	35	37
5-9	1604	1597	0	0	2057	1972	10	15	1926	1871	37	28
10-14	1312	1386	5	1	1838	1817	8	8	1951	1994	19	33
15-19	1290	1500	2	1	1333	1714	3	8	1951	2260	13	26
20-24	1448	1840	5	6	1200	1359	14	12	1706	2106	30	37
25-29	1758	1831	1	2	1183	1143	19	21	1300	1208	13	26
30-34	1676	1698	1	0	1261	1391	13	18	888	992	16	13
35-39	1535	1542	2	0	1417	1523	8	7	897	906	14	20
40-44	1263	1401	4	1	1383	1467	2	1	1104	1295	9	16
45-49	1236	1323	0	1	1272	1361	3	1	1231	1418	12	7
50-54	1182	1351	0	1	1079	1225	0	1	1220	1350	9	6
55-59	1113	1241	0	0	1013	1108	0	0	1099	1231	4	3
60-64	1011	1087	1	0	813	1140	0	3	829	1123	2	2
65-69	752	949	1	0	781	1036	2	1	674	951	0	3
70-74	520	665	0	1	623	856	0	0	534	757	2	4
75-79*	450	661	0	0	385	598	1	0	404	754	2	2
80-84*	0	0	0	0	182	325	1	0	216	459	4	2
85-UP	80	147	1	1	92	218	0	0	162	327	2	2
TOTALS	20360	22292	23	16	20243	22534	115	129	19947	22885	233	278
GRAND TOTAL				42691				43021				43343

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL
CV-RENAL	529.0	897.0	878.0		529.0	897.0	878.0		529.0	897.0	878.0	
	474.2	812.6	934.2		474.2	812.6	934.2		474.2	812.6	934.2	
	1.116	1.104	0.920		1.116	1.104	0.920		1.116	1.104	0.920	
HEART	399.0	655.0	662.0		399.0	655.0	662.0		399.0	655.0	662.0	
	339.2	575.3	666.2		339.2	575.3	666.2		339.2	575.3	666.2	
	1.176	1.139	0.997		1.176	1.139	0.997		1.176	1.139	0.997	
NON CV-R	397.0	663.0	630.0		397.0	663.0	630.0		397.0	663.0	630.0	
	365.7	593.7	625.1		365.7	593.7	625.1		365.7	593.7	625.1	
	1.086	1.117	1.008		1.086	1.117	1.008		1.086	1.117	1.008	
CANCER	161.0	244.0	269.0		161.0	244.0	269.0		161.0	244.0	269.0	
	137.4	222.8	239.3		137.4	222.8	239.3		137.4	222.8	239.3	
	1.172	1.095	1.124		1.172	1.095	1.124		1.172	1.095	1.124	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1959				1969				1971				1971				1971			
	1949	1950	49-50 SUM	59-61 SUM	1949	1950	49-50 SUM	59-61 SUM	1949	1950	49-50 SUM	59-61 SUM	1949	1950	49-50 SUM	59-61 SUM	1949	1950	49-50 SUM	59-61 SUM	1949	1950	49-50 SUM	59-61 SUM
TOTAL	469	457	926	1560	511	562	1073	1560	517	508	1025	1560	483	508	991	1560	483	508	991	1560	483	508	991	1560
CV-RENAL	262	267	529	897	294	321	615	897	302	282	584	897	294	302	596	897	294	302	596	897	294	302	596	897
HEART	201	198	399	665	212	238	450	665	217	210	427	665	210	210	420	665	210	210	420	665	210	210	420	665
NON CV-R	207	190	397	663	217	241	458	663	215	226	441	663	189	226	415	663	189	226	415	663	189	226	415	663
CANCER	84	77	161	244	80	90	170	244	86	97	183	244	86	97	183	244	86	97	183	244	86	97	183	244

CITY CHARACTERISTICS

STATE	MASSACHUSETTS	
	1950 RANK BY POPULATION	1950 RANK BY POPULATION
1950 POP./SQ. MILE	1552	1552
1970 POP./SQ. MILE	1559	1559
1949 MED. FAM. INCOME	3253	3253
1969 MED. FAM. INCOME	9692	9692
URBAN CLASS	INDEPENDENT	INDEPENDENT
1950 URBAN AREA RANK	-	-
JAN MEAN TEMPERATURE	24	24
JULY MEAN TEMPERATURE	71	71
MEAN ANN. PRECIPITATION	42	42
LAND RESOURCE REGION	R	R
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	6 PPM	6 PPM
NON-CARBONATE HARDNESS	3 PPM	3 PPM
FLOUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF
TOTAL	12057	13082	20	8	12285	13468	8	25769	12285	13468	8	25769	12285	13468	8	25769	12285	13468
GRAND TOTAL	12057	13082	20	8	12285	13468	8	25769	12285	13468	8	25769	12285	13468	8	25769	12285	13468

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*
CV-RENAL									
HEART									
NON CV-R									
CANCER									

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	BY CAUSE AND YEAR										STATE	MASSACHUSETTS		
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971			69-71 SUM	
TOTAL	300	303	603	323	357	300	980	349	291	362	1002	1950 RANK BY POPULATION	477	1049
CV-RENAL	193	194	387	228	237	185	650	195	175	207	577	1950 POP/SQ. MILE	1131	1131
HEART	144	137	281	178	176	126	480	128	113	146	387	1949 MED. FAM. INCOME	3115	3115
NON CV-R	107	109	216	95	120	115	330	154	116	155	425	1969 MED. FAM. INCOME	9750	9750
CANCER	45	49	94	43	51	51	145	63	52	58	173	URBAN CLASS	-	-
												1950 URBAN AREA RANK	-	-
												JAN MEAN TEMPERATURE	28	28
												JULY MEAN TEMPERATURE	68	68
												MEAN ANN. PRECIPITATION	46	46
												LAND RESOURCE REGION	R	R
												WATER SOURCE	SURFACE	SURFACE
												TOTAL HARDNESS	28 PPM	28 PPM
												NON-CARBONATE HARDNESS	20 PPM	20 PPM
												FLUORINATION STATUS	NO ARTIFICIAL	NO ARTIFICIAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NH	NP	WM	WP	NH	NP	WM	WP	NH	NP
LT 1	417	383	1	2	488	435	3	3	360	350	3	3
1-4	1676	1729	4	2	1822	1754	13	15	1583	1474	25	28
5-9	1770	1604	6	12	2059	1964	13	17	2049	2067	33	30
10-14	1407	1448	13	10	1865	1776	13	16	1851	2083	22	18
15-19	1414	1768	9	6	1415	1776	13	16	1851	2083	22	18
20-24	1475	1637	9	12	1415	1776	9	13	1391	1685	11	29
25-29	1631	1753	11	12	1607	1793	15	14	1226	1248	16	22
30-34	1644	1748	6	11	1230	1369	13	11	991	1091	25	23
35-39	1505	1648	5	5	1408	1550	5	11	988	1098	23	17
40-44	1365	1523	2	8	1458	1623	11	12	1136	1245	12	14
45-49	1365	1523	3	7	1319	1506	11	9	1260	1454	7	10
50-54	1265	1431	7	7	1234	1444	4	7	1316	1526	11	13
55-59	1471	1593	6	5	1132	1344	4	4	1177	1359	9	11
60-64	1244	1405	4	5	1082	1342	3	6	990	1276	6	6
65-69	928	1145	6	9	1054	1361	3	10	790	1156	6	11
70-74	658	884	6	7	813	1132	5	6	700	1191	3	16
75-79	706	1038	7	6	513	726	2	4	571	927	3	8
80-84	0	0	0	0	259	435	2	5	367	671	12	5
85-UP	120	244	2	3	171	310	4	2	225	419	3	4
TOTALS	22192	24855	107	126	21500	24531	138	177	21161	24396	266	297
GRAND TOTAL				47280				46346				46120

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1204.0	1129.7	1.066		1888.0	1821.8	1.036		1770.0	2008.4	0.881	
CV-RENAL	721.0	721.0	1.000		1148.0	1089.5	1.054		1047.0	1246.0	0.839	
HEART	468.0	471.5	0.993		780.0	766.1	1.018		792.0	862.6	0.918	
NON CV-R	483.0	463.0	1.043		740.0	732.3	1.011		723.0	760.5	0.951	
CANCER	189.0	180.7	1.046		311.0	285.0	1.091		330.0	297.5	1.109	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	600	604	1204		670	608	610	1888	621	570	579	1770
CV-RENAL	349	372	721		423	381	340	1148	356	334	357	1047
HEART	225	243	468		287	263	230	780	266	264	262	792
NON CV-R	251	232	483		247	227	266	740	285	236	222	723
CANCER	87	102	189		102	90	119	311	107	120	103	330

CITY CHARACTERISTICS

STATE	CODE
MASSACHUSETTS	248
1950 RANK BY POPULATION	1478
1950 POP/SQ. MILE	1428
1970 POP/SQ. MILE	3122
1949 MED. FAM. INCOME	9756
1969 MED. FAM. INCOME	INDEPENDENT
URBAN CLASS	27
1950 URBAN AREA RANK	38
JAN MEAN TEMPERATURE	73
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	38
LAND RESOURCE REGION	WATER SOURCE
WATER SOURCE	TOTAL HARDNESS
TOTAL HARDNESS	NON-RECYCLED WASTE
NON-RECYCLED WASTE	25 BPM
25 BPM	FLUORIDATION STATUS
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	461	410	3	8	505	583	15	22	416	403	14	13
1-4	2030	2094	27	20	2110	1988	47	48	1668	1614	72	67
5-9	2054	1869	16	19	2246	2252	43	41	2229	2111	107	102
10-14	1608	1603	17	11	2117	2042	29	29	2286	2199	89	91
15-19	1542	1662	8	9	1509	1770	23	21	2017	2127	62	54
20-24	1731	1975	9	14	1245	1525	26	38	1635	2002	40	53
25-29	2044	2098	23	17	1353	1327	24	25	1359	1347	43	60
30-34	1996	2147	19	17	1461	1428	20	30	950	1038	39	59
35-39	1906	2026	17	15	1587	1662	20	19	1057	1119	22	36
40-44	1747	1951	11	9	1507	1743	19	18	1236	1502	21	29
45-49	1680	1689	13	11	1696	1721	16	7	1300	1524	23	28
50-54	1572	2022	8	11	1498	1762	8	9	1295	1512	16	13
55-59	1282	1609	2	2	1298	1618	6	2	1111	1481	6	10
60-64	1007	1358	4	4	1119	1580	6	1	924	1490	10	13
65-69	656	964	1	3	822	1285	0	1	760	1026	5	5
70-74	661	955	1	2	566	847	0	3	509	1032	3	4
75-79	0	0	0	2	223	501	0	0	306	697	2	2
80-84	0	0	0	1	143	298	1	1	185	414	3	2
85-UP	101	163	0	1								
TOTALS	25712	28604	177	168	24322	27742	303	322	22597	26261	601	653
GRAND TOTAL				54661				52689				50112

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959-61				1969-71			
	1949	1950	49-50	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	678	610	1288		661	745	728	2134	747	697	683	2127
CV-RENAL	414	376	790		372	445	452	1269	422	419	386	1227
HEART	282	280	562		283	300	276	859	320	318	296	934
NON CV-R	284	234	498		289	345	272	906	320	278	297	900
CANCER	96	85	183		114	119	113	346	130	116	136	382

CITY CHARACTERISTICS

CODE

MASSACHUSETTS

STATE	1950 RANK BY POPULATION	21603
1950 POP./SQ. MILE		2393
1970 POP./SQ. MILE		3201
1949 MED. FAM. INCOME		9218
1969 MED. FAM. INCOME		CENTRAL
URBAN CLASS		38
1950 URBAN AREA RANK		25
JAN MEAN TEMPERATURE		72
JULY MEAN TEMPERATURE		44
MEAN ANN. PRECIPITATION		R
LAND RESOURCE REGION		
WATER SOURCE		SURFACE
TOTAL HARDNESS		26 PPM
NON-CARBONATE HARDNESS		8 PPM
FLUORIDATION STATUS		NO ARTIFICIAL, LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	1288.0	2134.0	2127.0	OBSERVED*	1134.1	1962.2	2073.6	OBSERVED*	1134.1	1962.2	2073.6
TOTAL	EXP/EXP	1.136	1.088	1.026								
CV-RENAL	OBSERVED	790.0	1269.0	1227.0	EXPECTED*	647.4	1152.6	1269.3	OBSERVED	790.0	1269.0	1227.0
HEART	EXP/EXP	1.220	1.101	0.567					EXPECTED*	647.4	1152.6	1269.3
	OBSERVED	562.0	988.0	934.0	OBS/EXP	1.213	1.211	1.059	OBSERVED	562.0	988.0	934.0
	EXP/EXP	463.4	816.0	882.2					EXPECTED*	463.4	816.0	882.2
NON CV-R	OBS/EXP	1.213	1.211	1.059					OBS/EXP	1.213	1.211	1.059
	OBSERVED	498.0	865.0	900.0	EXPECTED*	486.7	809.6	804.3	OBSERVED	498.0	865.0	900.0
CANCER	EXP/EXP	1.023	1.068	1.119					EXPECTED*	486.7	809.6	804.3
	OBSERVED	183.0	346.0	382.0	OBS/EXP	0.964	1.100	1.217	OBSERVED	183.0	346.0	382.0
	EXP/EXP	189.8	314.5	314.0					EXPECTED*	189.8	314.5	314.0
	OBS/EXP	0.964	1.100	1.217					OBS/EXP	0.964	1.100	1.217

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM		NP		WM		NP		WM		NP	
	WM	NP	WM	NP	WM	NP	WM	NP	WM	NP	WM	NP
LT-1	785	726	2	6	719	695	6	8	593	584	15	21
1-4	3011	2937	13	14	2816	2569	12	22	2161	2127	70	50
5-9	2985	2861	15	7	2899	2943	28	24	2899	2772	56	74
10-14	2446	2317	17	11	2970	2911	29	25	2825	2764	61	55
15-19	2210	2456	8	3	2141	2341	16	14	2624	2695	40	30
20-24	2573	2879	11	12	1652	1942	12	14	2483	2918	30	46
25-29	3137	3496	17	12	1927	1825	10	8	2043	1954	41	41
30-34	3242	3374	12	13	1886	2089	7	15	1446	1422	39	41
35-39	3096	3209	11	7	2242	2545	17	17	1352	1381	27	20
40-44	2545	2715	8	4	2323	2547	19	11	1559	1735	17	24
45-49	2254	2619	5	9	2276	2436	7	9	1834	2172	22	18
50-54	2282	2786	8	4	1951	2200	5	5	2005	2307	23	19
55-59	2336	2540	9	3	1856	2266	7	5	1887	2112	5	13
60-64	2122	2147	5	4	1606	2135	3	4	1471	1917	14	15
65-69	1628	1828	4	1	1589	2021	2	2	1217	1917	14	15
70-74	1687	1245	1	3	1277	1643	4	5	1015	1728	2	9
75-79*	854	1268	1	1	851	1028	3	5	819	1262	4	5
80-84*	0	0	0	0	355	529	1	3	453	788	5	8
85-UP	87	192	0	0	139	295	0	2	270	493	2	2
TOTALS	38680	41595	147	114	33587	36960	188	198	30956	34974	485	500
GRAND TOTAL				80536				70933				66915

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*
TOTAL	1882.0	2901.0	1589.2	2540.7	1184.0	2797.0
	1.184	1.142	1.184	1.142	1.184	1.018
CV-RENAL	1120.0	1722.0	887.9	1478.4	1120.0	1609.0
	1.261	1.165	1.261	1.165	1.261	0.964
HEART	796.0	1139.0	641.6	1054.8	796.0	1132.0
	1.241	1.080	1.241	1.080	1.241	0.972
NON CV-R	762.0	1175.0	701.2	1062.3	762.0	1188.0
	1.087	1.110	1.087	1.110	1.087	1.101
CANCER	299.0	522.0	269.2	416.9	299.0	492.0
	1.111	1.252	1.111	1.252	1.111	1.172

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	
TOTAL	1017	865	1882	2901	951	906	940	2797	MASSACHUSETTS
CV-RENAL	606	514	1120	1722	555	507	547	1609	1950 POP/50- MILP 12020
HEART	424	372	796	1139	393	359	380	1132	1970 POP/50- MILP 9840
NON CV-R	411	351	762	1179	396	399	393	1188	1949 MED. FAM. INCOME 3048
CANCER	165	134	299	522	166	166	160	492	1959 MED. FAM. INCOME 9507
									URBAN CLASS. CENTRAL
									1950 URBAN AREA RANK 111
									JAN MEAN TEMPERATURE 24
									JULY MEAN TEMPERATURE 71
									MEAN ANN. PRECIPITATION 42
									LAND RESOURCE REGION R
									WATER SOURCE SURFACE
									TOTAL HARDNESS 44 PPM
									NON-CARBONATE HARDNESS 18 PPM
									FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	824	918	2	2	1030	1021	4	5	873	876	18	23
1-4	3883	3833	4	15	3878	3837	30	35	3374	3151	53	63
5-9	3793	3619	15	8	4274	4267	35	26	4263	4279	66	76
10-14	3365	3117	18	8	4085	3978	20	26	4394	4382	64	58
15-19	3223	3477	6	3	3042	3128	17	18	4385	4167	71	61
20-24	3431	3941	18	2	2614	2675	24	20	4075	4339	85	66
25-29	3880	3969	10	11	2534	2514	20	26	2908	2757	40	52
30-34	3469	3865	4	9	2711	2908	34	17	2087	2171	31	34
35-39	3160	3410	8	8	2935	3135	20	13	2073	2151	26	37
40-44	2827	3202	5	4	2848	3259	13	16	2401	2661	27	21
45-49	2643	3029	3	6	2643	2937	10	14	2606	2837	19	17
50-54	2675	3224	9	4	2321	2679	8	5	2519	2965	17	23
55-59	2529	2910	3	3	2142	2596	8	5	2200	2597	16	12
60-64	2035	2577	7	2	1900	2637	5	0	1790	2421	12	15
65-69	1732	2233	1	3	1765	2450	7	1	1428	2192	9	10
70-74	1209	1735	1	1	1229	1921	5	1	1147	2068	5	11
75-79*	1165	1736	3	1	796	1259	1	3	766	1541	7	9
80-84*	0	0	0	0	378	704	0	0	440	929	10	6
85-UP	135	267	0	2	184	400	1	0	239	590	4	3
TOTALS	45978	51062	117	92	43309	48305	262	231	43988	49074	580	597
GRAND TOTAL				97249				92107				94239

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	1273	885	2158		1239	1211	1240	3690	1233	1184	1213	3630
CV-RENAL	762	506	1268		731	711	759	2201	748	726	683	2157
HEART	513	329	842		531	534	572	1637	515	542	513	1570
NON CV-R	511	379	890		508	500	481	1489	485	458	530	1473
CANCER	183	147	330		183	164	192	539	178	184	215	577

CITY CHARACTERISTICS

STATE
1950 RANK BY POPULATION

MASSACHUSETTS	111
1950 POP/SQ. MILE	7539
1970 POP/SQ. MILE	6929
1949 MED. FAM. INCOME	3063
1969 MED. FAM. INCOME	9495
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	115
JAN MEAN TEMPERATURE	25
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	41
LAND RESOURCE REGION	R
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	42 PPM
NON-CARBONATE HARDNESS	10 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL		1268.0	2201.0	2157.0		1268.0	2201.0	2157.0		1268.0	2201.0	2157.0
		1910.2	1718.8	1901.5		1910.2	1718.8	1901.5		1910.2	1718.8	1901.5
		1.151	1.281	1.134		1.151	1.281	1.134		1.151	1.281	1.134
HEART		842.0	1637.0	1570.0		842.0	1637.0	1570.0		842.0	1637.0	1570.0
		787.1	1336.5	1.180		787.1	1336.5	1.180		787.1	1336.5	1.180
		1.070	1.341			1.070	1.341			1.070	1.341	
NON CV-R		890.0	1489.0	1473.0		890.0	1489.0	1473.0		890.0	1489.0	1473.0
		837.4	1276.4	1314.1		837.4	1276.4	1314.1		837.4	1276.4	1314.1
		1.063	1.167	1.121		1.063	1.167	1.121		1.063	1.167	1.121
CANCER		330.0	539.0	577.0		330.0	539.0	577.0		330.0	539.0	577.0
		320.7	482.8	495.4		320.7	482.8	495.4		320.7	482.8	495.4
		1.029	1.116	1.165		1.029	1.116	1.165		1.029	1.116	1.165

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NE	WM	WF	NH	NE	WM	WF	NH	NE
LT 1	897	900	12	18	929	877	21	36	783	728	44	48
LT-4	305	3273	43	56	3922	3552	88	105	2890	2704	175	173
5-9	305	3562	49	57	4307	4034	111	109	3949	3747	203	175
10-14	2897	2998	54	57	3936	3778	67	75	4124	3806	146	166
15-19	2956	2966	54	52	2855	3135	48	65	3498	3578	151	153
20-24	3138	3484	38	47	2162	2522	44	47	2941	3474	108	145
25-29	3786	4021	30	37	2470	2607	58	73	2620	2677	91	114
30-34	3790	3969	30	32	2747	2887	47	49	1957	2014	65	72
35-39	3379	3747	32	36	2857	3069	44	54	2004	2119	63	77
40-44	3201	3553	15	22	2892	3241	41	36	2244	2494	64	77
45-49	2954	3208	25	24	2790	3179	23	26	2401	2694	51	60
50-54	2940	3311	31	24	2570	3008	20	13	2533	2896	50	52
55-59	2801	3157	19	28	2404	2744	22	27	2319	2840	33	45
60-64	2470	2690	18	15	2175	2632	31	28	2022	2615	24	27
65-69	1960	2421	9	14	1909	2693	18	25	1647	2325	14	34
70-74	1277	1755	11	8	1544	2152	7	13	1356	2178	15	30
75-79#	1348	1907	5	12	981	1398	5	7	937	1703	14	21
80-84#	0	0	0	0	493	776	9	4	545	1021	9	19
85-UP	178	360	3	1	296	453	2	4	369	714	7	13
TOTALS	47278	51446	484	530	44239	48737	706	796	41139	46327	1327	1501
GRAND TOTAL				99738				94478				90294

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	2469.0	2172.4	1.137		3885.0	3430.4	1.133		3393.0	3643.8	0.931	
CV-RENAL												
OBSERVED	1445.0	2201.0										
EXPECTED*	1252.3	2014.4										
OBS/EXP	1.154	1.093										
HEART												
OBSERVED	986.0	1481.0										
EXPECTED*	892.8	1425.5										
OBS/EXP	1.104	1.039										
NON CV-R												
OBSERVED	1024.0	1684.0										
EXPECTED*	920.1	1416.0										
OBS/EXP	1.113	1.189										
CANCER												
OBSERVED	441.0	657.0										
EXPECTED*	355.6	548.1										
OBS/EXP	1.240	1.199										

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	1959	1960	1961	1969	1970	1971	59-71	STATE	1950 RANK BY POPULATION	MASSACHUSETTS
TOTAL	1196	1273	1201	1344	1250	1194	1180	1059	3303	16790	1950 POP/SG. MILE	3590
CV-RENAL	728	717	705	749	707	709	652	588	1942	1970 POP/SG. MILE		3593
HEART	498	488	505	492	480	501	492	442	1958	1949 MED. FAM. INCOME		9739
NON CV-R	468	556	506	593	543	495	483	462	1441	1963 MED. FAM. INCOME		
CANCER	205	236	228	224	205	199	186	211	536	URBAN CLASS. RANK		
										1950 URBAN AREA RANK		
										1950 URBAN AREA RANK		
										JULY MEAN TEMPERATURE		
										JULY MEAN TEMPERATURE		
										MEAN ANN. PRECIPITATION		
										LAND RESOURCE REGION		
										WATER SOURCE		
										TOTAL HARDNESS		
										NON-CARBONATE HARDNESS		
										FLUORIDATION STATUS		
												NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	562	522	5	6	624	609	14	8	513	484	9	10
1-4	2366	2299	27	27	2226	2200	35	34	1873	1791	40	39
5-9	2264	2161	20	18	2460	2472	39	43	2334	2217	51	35
10-14	1860	1816	27	22	2427	2334	38	47	2374	2303	56	37
15-19	1788	1969	17	17	1844	2005	30	30	2065	2241	22	40
20-24	2076	2359	18	25	1488	1692	20	23	2031	2544	37	40
25-29	2270	2429	18	27	1647	1674	30	18	1953	1875	33	43
30-34	2154	2338	28	27	1667	1727	21	31	1371	1280	39	28
35-39	2038	2237	22	21	1699	1955	27	32	1211	1346	29	19
40-44	1946	2242	23	11	1736	1941	32	31	1401	1557	28	36
45-49	1816	2074	14	17	1703	1984	24	19	1527	1737	29	28
50-54	1667	1961	19	18	1614	1904	19	19	1536	1790	26	31
55-59	1484	1693	11	16	1497	1781	16	16	1463	1863	19	15
60-64	1279	1450	11	7	1299	1672	21	13	1280	1717	15	18
65-69	932	1306	8	11	1048	1420	11	11	1051	1528	17	19
70-74	624	1037	9	11	819	1122	11	4	765	1302	14	17
75-79*	713	1103	7	4	488	855	8	6	516	969	7	14
80-84*	0	0	0	0	234	493	2	11	256	358	7	4
85-UP	99	197	1	3	157	363	1	1	170	441	3	10
TOTALS	27938	31293	285	288	26677	30203	399	397	25620	29503	481	483
GRAND TOTAL				59804				57676				56127

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1339.0	2100.0	2109.0	1200.6	2027.6	2140.3	1.115	1.036	0.985
CV-RENAL	784.0	1236.0	1130.0	683.5	1184.8	1284.7	1.147	1.043	0.880
HEART	584.0	942.0	837.0	465.8	834.9	897.8	1.202	1.128	0.932
NON CV-R	555.0	864.0	979.0	517.2	842.8	855.7	1.073	1.025	1.144
CANCER	222.0	379.0	430.0	195.2	319.2	330.8	1.137	1.187	1.300

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	MASSACHUSETTS	195	
1950 RANK BY POPULATION	1950	12459	
1950 POP./SQ. MILE	1970	11005	
1949 POP./SQ. MILE	1949	3446	
1949 MED. FAM. INCOME	1969	10204	
1969 MED. FAM. INCOME	URBAN CLASS	FRINGER	
1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	29	
JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	32	
JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	38	
MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	R	
LAND RESOURCE REGION	TRAFFIC INDEX	SURFACE	
TRAFFIC INDEX	TRAFFIC INDEX	12 DPM	
TRAFFIC INDEX	MOISTURE HARDNESS	6 DPM	
MOISTURE HARDNESS	FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	586	592	11	2	631	610	13	9
1-4	2525	2396	26	31	2490	2450	59	57
5-9	2602	2428	40	39	2822	2640	57	65
10-14	2146	2140	34	36	2836	2626	46	58
15-19	2404	2322	32	38	2684	2359	32	38
20-24	2602	2622	30	26	1747	1740	35	35
25-29	2471	2665	30	32	1854	2002	31	48
30-34	2163	2495	34	41	1889	2237	41	52
35-39	2131	2465	34	45	1857	2223	46	45
40-44	2131	2465	20	28	1886	2233	36	24
45-49	1986	2395	21	25	1855	2139	22	30
50-54	2050	2249	19	24	1603	2065	27	32
55-59	1719	1865	15	22	1559	1778	13	18
60-64	1424	1442	20	21	1249	1479	12	20
65-69	1036	1257	10	17	883	1109	18	16
70-74	712	913	9	7	558	749	9	14
75-79	612	965	4	12	282	448	0	7
80-84	0	0	0	0	149	306	5	3
85-UP	123	202	0	5	30628	33189	543	611
TOTALS	31462	33828	395	428				
GRAND TOTAL				66113				64971

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*
TOTAL	1192.0	1206.4	2095.0	2119.7	2112.0	2350.0
						0.899
CV-RENAL	692.0	687.3	1272.0	1219.1	1183.0	1402.5
						0.843
HEART	516.0	491.8	941.0	866.3	868.0	982.3
						0.884
NON CV-R	500.0	543.1	823.0	900.6	936.0	947.5
						0.982
CANCER	222.0	202.5	381.0	343.2	424.0	368.1
						1.152

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1971			
	1949	1950	1959	1960	1961	1969	1970	1971	1971	1971	1971	1971
TOTAL	593	599	710	685	700	742	730	641	2113	2113	2113	2113
CV-RENAL	333	359	416	420	436	422	396	365	1183	1183	1183	1183
HEART	250	266	297	313	331	315	282	271	868	868	868	868
NON CV-R	260	240	294	265	264	320	334	276	930	930	930	930
CANCER	116	106	149	110	122	155	148	121	424	424	424	424

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
MASSACHUSETTS	178	8162	8050	3832	11145	FRINGE	6	29	72	38	R	SURFACE	12 PPM	6 PPM	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT 1	238	208	0	0
1-4	1003	1006	1	1
5-9	1098	1066	3	0
10-14	880	867	3	1
15-19	764	863	3	2
20-24	753	883	3	3
25-29	725	873	2	1
30-34	838	869	0	2
35-39	890	1017	0	2
40-44	907	1124	0	2
45-49	902	1030	0	1
50-54	836	993	0	1
55-59	726	847	1	0
60-64	591	701	1	2
65-69	485	698	1	0
70-74	317	552	1	1
75-79	389	710	0	0
80-84*	0	0	0	0
85-UP	76	170	0	0
TOTALS	12468	14481	21	18
GRAND TOTAL				26988

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

	OBSERVED DEATHS BY CAUSE AND YEAR						
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM
TOTAL	304	372	673	345	342	331	958
HEART DISEASE	111	131	242	108	108	106	278
CANCER	128	166	294	132	131	150	403
NON CH-R	124	151	275	136	124	123	383
CANCER	62	64	126	63	57	55	175

OBSERVED DEATHS
BY CAUSE AND YEAROBSERVED DEATHS
BY CAUSE AND YEAR

69-71	929
SUM	551
	408
	378
	161

197 30
19 13
11 5

1970
329
184
139
145
56

1969
298
175
131
123
52

-61
UM
958
575
403
383
175

1961
331
208
150
123
55

1960	312
	188
	131
	124
	57

1959
315
179
122
136
63

-50
JM
673
398
294
275
126

1950	372
	221
	166
	151
	64

1949	301
	177
	128
	124
	62

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* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE		1949-50	1959-61	1969-71
TOTAL	OBSERVED	673.0	958.0	929.0
	EXPECTED*	656.9	1095.6	1213.8
	OBS/EXP	1.021	0.874	0.765
CV-RENEW	OBSERVED	398.0	575.0	551.0
	EXPECTED*	394.1	653.5	735.4
	OBS/EXP	1.010	0.880	0.749
HEART	OBSERVED	294.0	403.0	408.0
	EXPECTED*	276.5	458.6	512.1
	OBS/EXP	1.063	0.879	0.797
NON CV-R	OBSERVED	275.0	383.0	378.0
	EXPECTED*	261.8	442.0	478.4
	OBS/EXP	1.039	0.867	0.790
CANCER	OBSERVED	126.0	175.0	161.0
	EXPECTED*	103.4	170.8	180.8
	OBS/EXP	1.218	1.024	0.871

CITY CHARACTERISTICS	CODE
STATE	454
1960 BANK BY POPULATION	MASS
1950 POP/50. MIL.	5623
1970 POP/50. MIL.	7060
1949 MED. FAM. INCOME	4111
1969 MED. FAM. INCOME	12426
URBAN CLASS	PRING
1950 URBAN AREA RANK	6
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	72
ANN. MEAN. PRECIPITATION	38
LAND RESOURCE REGION	R
WATER SOURCE	SURF
TOTAL HARDNESS	12
NON-CARBONATE HARDNESS	6
FLUORIDATION STATUS	NO A

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	BY CAUSE AND YEAR					CITY CHARACTERISTICS					CODE
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	
1325	1226	2551	1346	1323	3946	1401	1305	1335	4041	STATE	MASSACHUSETTS
TOTAL	764	748	789	748	2335	847	798	809	2454	1950 BANK BY POPULATION	96
CV-RENAL	550	527	543	540	1629	581	580	591	1806	1950 POP/SQ. MILE	5717
HEART	561	478	529	557	1611	554	507	526	1587	1949 MED. F.M. INCOME	2947
NON CV-R	228	196	225	220	661	241	241	241	723	1969 MED. F.M. INCOME	8230
CANCER										URBAN CLASS	CENTRAL
										1950 URBAN AREA RANK	98
										JAN MEAN TEMPERATURE	29
										JULY MEAN TEMPERATURE	70
										MEAN ANNU. PRECIPITATION	43
										LAND RESOURCE REGION	R
										WATER SOURCE	SURFACE
										TOTAL HARDNESS	15 PPM
										NON-CARBONATE HARDNESS	5 PPM
										FLUORIDATION STATUS	NO ARTIFICIAL

NORTHAMPTON
-196-

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960		
	WM	WF	NM	WM	WF	NM
LT 1	197	256	0	0	0	0
1-4	952	927	0	0	0	0
5-9	816	1175	3	2	2	2
10-14	692	1037	1	1	1	1
15-19	625	1796	2	1	6	4
20-24	749	1934	1	19	14	72
25-29	1802	568	1	19	1156	47
30-34	1034	649	8	4	910	17
35-39	1075	841	5	6	658	6
40-44	1073	970	7	8	604	9
45-49	950	1018	8	5	815	12
50-54	888	983	3	5	884	3
55-59	941	954	3	2	912	9
60-64	709	788	2	4	797	10
65-69	520	769	3	4	661	5
70-74	381	700	1	3	541	6
75-79#	351	454	3	2	712	2
80-84#	0	299	1	2	419	0
85-UP	70	145	1	0	325	3
		75	1	0	173	4
		142	1	0	97	1
TOTALS	13008	15922	74	59	13124	111
GRAND TOTAL			29063	67		193

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	852.0	857.0	1.331	852.0	857.0	1.331	913.0	913.0	1.143.1
CV-RENAL	509.0	494.0	1.362	509.0	494.0	1.362	470.0	470.0	0.799
HEART	383.0	360.0	1.437	383.0	360.0	1.437	443.0	443.0	0.686
NON CV-R	343.0	363.0	1.289	343.0	363.0	1.289	443.0	443.0	0.998
CANCER	107.0	128.0	1.014	107.0	128.0	1.014	167.0	167.0	0.950

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949			1950			1959			1961			1969			1971			1971			69-71		
	WM	WF	NM	WM	WF	NM	WM	WF	NM	WM	WF	NM	WM	WF	NM	WM	WF	NM	WM	WF	NM	SUM	SUM	SUM
TOTAL	285	567	852	285	567	852	263	567	852	308	286	308	310	301	302	310	301	302	310	301	302	913	913	913
CV-RENAL	158	351	509	158	351	509	152	351	509	185	157	185	167	144	159	167	144	159	167	144	159	470	470	470
HEART	124	269	381	124	269	381	112	269	381	132	116	132	123	100	112	123	100	112	123	100	112	335	335	335
NON CV-R	127	216	343	127	216	343	111	216	343	123	111	123	143	157	143	143	157	143	143	157	143	443	443	443
CANCER	48	59	107	48	59	107	39	59	107	44	45	44	51	57	59	51	57	59	59	57	59	167	167	167

CITY CHARACTERISTICS

STATE	MASSACHUSETTS	
	1950 RANK BY POPULATION	421
1950 POP./SQ. MILE	860	
1970 POP./SQ. MILE	865	
1940 MED. FAM. INCOME	3180	
1969 MED. FAM. INCOME	10180	
URBAN CLASS	38	
1950 URBAN AREA RANK	23	
JAN MEAN TEMPERATURE	69	
JULY MEAN TEMPERATURE	69	
MEAN ANN. PRECIPITATION	43	
LAND RESOURCE REGION	R	
WATER SOURCE	GROUND AND SURFACE	
TOTAL HARDNESS	21 PPM	
NON-CARBONATE HARDNESS	0 PPM	
FLUORIDATION STATUS	UNCERTAIN	

CODE

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NP	WM	WF	WM	WF	NM	NP	WM	WF	WM	WF	NM	NP	WM	WF
LT 1	547	488	13	5	635	581	17	16	422	459	12	17	422	459	12	17	422	459
1-4	2201	2073	31	26	2670	2481	55	56	1817	1714	77	66	1817	1714	77	66	1817	1714
5-9	2058	2007	33	27	2952	2875	63	48	2814	2718	78	88	2814	2718	78	88	2814	2718
10-14	1718	1648	25	25	2652	2490	48	42	2888	2810	74	88	2888	2810	74	88	2888	2810
15-19	1553	1747	30	22	1649	1868	30	32	2391	2470	55	58	2391	2470	55	58	2391	2470
20-24	1661	2003	29	38	1248	1452	24	32	1616	2028	39	62	1616	2028	39	62	1616	2028
25-29	2091	2282	32	32	1530	1672	31	34	1487	1607	35	47	1487	1607	35	47	1487	1607
30-34	1974	2124	27	25	1755	1862	38	48	1286	1357	36	39	1286	1357	36	39	1286	1357
35-39	1877	2012	19	29	1968	2126	31	42	1394	1487	38	49	1394	1487	38	49	1394	1487
40-44	1720	1801	17	25	1850	2061	29	25	1549	1713	38	40	1549	1713	38	40	1549	1713
45-49	1620	1750	21	25	1689	1865	28	18	1711	1938	35	35	1711	1938	35	35	1711	1938
50-54	1555	1615	18	15	1506	1684	11	23	1638	1859	24	22	1638	1859	24	22	1638	1859
55-59	1407	1579	19	10	1341	1531	14	15	1442	1643	20	20	1442	1643	20	20	1442	1643
60-64	1179	1308	8	9	1198	1389	21	8	1226	1439	14	20	1226	1439	14	20	1226	1439
65-69	872	1098	7	10	1023	1313	12	7	875	1287	20	20	875	1287	20	20	875	1287
70-74	644	778	4	6	759	1065	5	8	743	1054	5	12	743	1054	5	12	743	1054
75-79*	577	853	3	8	457	748	7	8	512	931	5	6	512	931	5	6	512	931
80-84*	0	0	0	0	223	775	0	6	284	377	5	6	284	377	5	6	284	377
85-89*	101	151	0	3	125	271	4	1	161	349	6	7	161	349	6	7	161	349
TOTALS	25355	27317	336	340	27230	29709	468	472	26256	29440	620	704	26256	29440	620	704	26256	29440
GRAND TOTAL				53348				57879				57020					57020	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1259.0	1914.0	1861.0	1259.0	1914.0	1861.0	1259.0	1914.0	1861.0
	1041.7	1818.9	1994.8	1041.7	1818.9	1994.8	1041.7	1818.9	1994.8
	1.209	1.052	0.933	1.209	1.052	0.933	1.209	1.052	0.933
CV-RENAL	713.0	1075.0	997.0	713.0	1075.0	997.0	713.0	1075.0	997.0
	584.6	1039.7	1189.3	584.6	1039.7	1189.3	584.6	1039.7	1189.3
	1.220	1.034	0.838	1.220	1.034	0.838	1.220	1.034	0.838
HEART	528.0	797.0	670.0	528.0	797.0	670.0	528.0	797.0	670.0
	418.1	732.6	833.2	418.1	732.6	833.2	418.1	732.6	833.2
	1.263	1.061	0.804	1.263	1.061	0.804	1.263	1.061	0.804
NON CV-R	546.0	839.0	864.0	546.0	839.0	864.0	546.0	839.0	864.0
	457.1	779.2	805.5	457.1	779.2	805.5	457.1	779.2	805.5
	1.194	1.077	1.073	1.194	1.077	1.073	1.194	1.077	1.073
CANCER	199.0	323.0	325.0	199.0	323.0	325.0	199.0	323.0	325.0
	170.2	290.1	316.3	170.2	290.1	316.3	170.2	290.1	316.3
	1.169	1.114	1.047	1.169	1.114	1.047	1.169	1.114	1.047

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949			1950			1959			1961			1969			1971			1970		
	WM	WF	NM	WM	WF	NM	WM	WF	NM	WM	WF	NM	WM	WF	NM	WM	WF	NM	WM	WF	NM
TOTAL	598	661	1259	598	661	1259	623	645	1914	646	646	1914	635	630	1861	635	630	1861	635	630	1861
CV-RENAL	344	369	713	344	369	713	337	387	1075	351	351	1075	347	347	997	347	347	997	347	347	997
HEART	257	271	528	257	271	528	251	293	797	253	253	797	242	209	670	242	209	670	242	209	670
NON CV-R	254	292	546	254	292	546	286	295	864	288	288	864	288	288	864	288	288	864	288	288	864
CANCER	90	109	199	90	109	199	102	111	323	110	110	323	106	125	325	106	125	325	106	125	325
STATE																					
1950 POP/SQ. MILE																					
1970 POP/SQ. MILE																					
1949 MED. FAM. INCOME																					
1969 MED. FAM. INCOME																					
URBAN CLASS																					
1950 URBAN AREA RANK																					
JAN MEAN TEMPERATURE																					
JULY MEAN TEMPERATURE																					
MEAN ANN. PRECIPITATION																					
LAND RESOURCE REGION																					
WATER SOURCE																					
TOTAL HARDNESS																					
NON-CARBONATE HARDNESS																					
FLUORIDATION STATUS																					

NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	751	695	0	1	1038	951	4	4	751	757	9	6
1-4	3528	3280	0	3	3614	3507	11	11	2796	2765	26	15
5-9	3564	3422	3	2	3942	3833	8	8	3665	3657	28	21
10-14	2595	2497	5	2	3776	3577	6	3	4002	3794	16	18
15-19	2586	2791	1	2	3099	3326	6	4	3585	3767	16	18
20-24	2854	3119	7	3	2396	2683	11	7	3360	4109	16	38
25-29	3075	3403	2	2	2433	2447	16	12	3008	2824	21	29
30-34	3096	3328	9	5	2520	2587	10	10	1963	1968	25	18
35-39	2845	3192	0	3	2546	2988	6	7	1871	2117	14	6
40-44	2818	3119	4	5	2701	3027	3	3	2261	2380	16	14
45-49	2665	2922	1	2	2620	2971	2	5	2369	2822	7	9
50-54	2571	2894	1	1	2498	2857	3	3	2461	2927	9	6
55-59	2318	2493	3	1	2305	2540	2	2	2285	2779	9	8
60-64	1864	2018	1	0	2010	2428	1	0	1995	2528	7	7
65-69	1317	1619	3	0	1669	2112	0	4	1601	2343	4	6
70-74	860	1196	0	2	1155	1601	1	1	1218	2055	5	10
75-79*	840	1269	0	1	722	1055	0	0	886	1528	3	4
80-84*	0	0	0	0	368	638	0	0	440	938	0	2
85-UP	114	244	0	0	184	410	1	0	286	630	5	1
TOTALS	40261	43501	40	33	41596	45638	91	84	40803	46688	239	236
GRAND TOTAL				83835				87409				87966

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL												
OBSERVED	945.0				1706.0				2879.0			
EXPECTED*	867.1				1551.6				2834.1			
OBS/EXP	1.090				1.099				1.016			
HEART												
OBSERVED	669.0				1706.0				2879.0			
EXPECTED*	622.9				1551.6				2834.1			
OBS/EXP	1.074				1.074				1.028			
NON CV-R												
OBSERVED	761.0				1706.0				2879.0			
EXPECTED*	684.5				1551.6				2834.1			
OBS/EXP	1.112				1.112				1.001			
CANCER												
OBSERVED	326.0				1706.0				2879.0			
EXPECTED*	259.1				1551.6				2834.1			
OBS/EXP	1.258				1.258				1.155			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM	49-50	1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	834	872	1706	1706	974	925	980	2879	961	959	973	2893
CV-RENAL	462	483	945	945	573	526	565	1664	479	465	509	1453
HEART	330	339	669	669	401	372	413	1186	343	345	379	1067
NON CV-R	372	389	761	761	401	399	415	1215	482	494	464	1440
CANCER	160	166	326	326	167	176	185	528	185	194	174	553

CITY CHARACTERISTICS		CODE	
STATE	MASSACHUSETTS		
1950 RANK BY POPULATION	133		
1950 POP/50. MILE	4990		
1970 POP/50. MILE	5464		
1949 MED. FAM. INCOME	3778		
1969 MED. FAM. INCOME	11094		
URBAN CLASS	FRINGE		
1950 URBAN AREA RANK	25		
JAN MEAN TEMPERATURE	68		
JULY MEAN TEMPERATURE	68		
MEAN ANN. PRECIPITATION	46		
LAND RESOURCE REGION	R		
WATER SOURCE	SURFACE		
TOTAL HARDNESS	12 PPM		
NON-CARBONATE HARDNESS	6 PPM		
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	336	317	0	0	437	387	0	1
1-4	1343	1498	3	3	1593	1539	5	1
5-9	1646	1492	2	2	1811	1257	2	3
10-14	1378	1491	8	1	1827	1611	2	3
15-19	1271	1191	8	1	1900	1823	4	3
20-24	1371	1526	12	2	1484	1401	1	2
25-29	1499	1575	3	2	1029	1223	22	4
30-34	1545	1503	3	2	1261	1205	2	2
35-39	1439	1539	5	2	1330	1358	3	4
40-44	1186	1199	1	2	1360	1440	1	2
45-49	1037	1077	0	3	1403	1492	3	3
50-54	999	1084	3	0	1072	1176	4	1
55-59	943	983	5	1	946	936	2	1
60-64	764	783	4	2	791	858	0	1
65-69	647	649	2	0	749	858	0	0
70-74	354	425	1	2	527	651	1	1
75-79*	328	377	2	3	342	370	1	2
80-84*	0	0	0	0	127	198	0	0
85-UP	42	74	0	0	76	102	0	0
TOTALS	18149	18532	58	24	19428	20482	141	29
GRAND TOTAL				36763				40080

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	SUM		1959	1960	1961	SUM
TOTAL	365	374	739		393	413	374	1180
CV-RENEWAL	219	223	442		227	249	211	687
HEART	165	151	316		165	188	168	521
NON CV-R	146	151	297		166	164	163	493
CANCER	44	65	109		73	70	70	213

CITY CHARACTERISTICS

STATE	MASSACHUSETTS
1950 RANK BY POPULATION	38
1950 POP/SQ. MILE	36565
1970 POP/SQ. MILE	7572
1949 MED. FAM. INCOME	3221
1969 MED. FAM. INCOME	10325
URBAN CLASS	PRINCE
1950 URBAN AREA RANK	6
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	38
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	12 PPM
NON-CARBONATE HARDNESS	6 PPM
FLOIDRICATION STATUS	NO ARTIFICIAL, LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	739.0	1180.0	1377.0		739.0	1180.0	1377.0	
CV-RENEWAL	442.0	687.0	787.0		442.0	687.0	787.0	
HEART	316.0	521.0	653.0		316.0	521.0	653.0	
NON CV-R	297.0	493.0	590.0		297.0	493.0	590.0	
CANCER	109.0	213.0	268.0		109.0	213.0	268.0	

CITY CHARACTERISTICS

STATE	MASSACHUSETTS
1950 RANK BY POPULATION	38
1950 POP/SQ. MILE	36565
1970 POP/SQ. MILE	7572
1949 MED. FAM. INCOME	3221
1969 MED. FAM. INCOME	10325
URBAN CLASS	PRINCE
1950 URBAN AREA RANK	6
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	38
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	12 PPM
NON-CARBONATE HARDNESS	6 PPM
FLOIDRICATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE/SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
TOTAL	19822	21884	103	71	41860		18185	20855	90	81	39211		18587	21606	166	197	40556	
GRAND TOTAL																		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	NP	NP	NP	NP	NP	NP	NP	NP	NP
TOTAL	1156.0	1587.0	1388.0	871.6	1426.1	1489.1	871.6	1426.1	1489.1
CV-RENAL	614.0	903.0	752.0	499.3	839.4	895.0	499.3	839.4	895.0
HEART	443.0	659.0	537.0	355.9	593.5	626.4	355.9	593.5	626.4
NON CV-R	542.0	684.0	636.0	372.3	586.8	594.1	372.3	586.8	594.1
CANCER	221.0	269.0	272.0	142.8	228.0	232.3	142.8	228.0	232.3

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949			1950			49-50			1959			1960			1961			59-61			1969			1970			1971			69-71			SUM																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

CITY CHARACTERISTICS

CITY CHARACTERISTICS	CODE	
	STATE	MASSACHUSETTS
1950 RANK BY POPULATION	284	284
1950 POP/SQ. MILE	5235	5235
1970 POP/SQ. MILE	3007	3007
1949 MED. FAM. INCOME	3502	3502
1963 MED. FAM. INCOME	3866	3866
URBAN CLASS AREA RANK	27	27
1950 MEAN TEMPERATURE	74	74
JULY MEAN TEMPERATURE	37	37
MEAN ANNUAL PRECIPITATION	48	48
LAND RESOURCE REGION	8	8
WATER SOURCE	54	54
TOTAL HARDNESS	47	47
NON-CARBONATE HARDNESS	54	54
FLUORIDATION STATUS	FLUORIDATED IN 1952	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	979	947	3	5	1187	1196	4	5
5-4	4143	3805	15	11	4153	3984	26	17
5-9	4003	3832	9	14	4055	3884	20	22
10-14	3892	3416	22	19	3881	3518	17	18
15-19	3550	3741	20	14	3075	3585	11	19
20-24	4074	4297	19	18	3221	3744	17	34
25-29	4169	4282	21	18	3317	3183	19	26
30-34	3627	3932	14	11	3080	3096	20	22
35-39	3412	3900	18	16	2744	2948	18	13
40-44	3204	3793	10	14	2592	2957	7	12
45-49	3120	3348	12	11	2500	3108	19	10
50-54	2829	3685	19	8	2395	2944	9	11
55-59	2425	2767	7	7	2429	2801	9	8
60-64	2059	2274	2	4	2030	2453	10	12
65-69	1647	1966	7	4	1643	2143	7	6
70-74	1130	1527	5	9	1226	1668	2	2
75-79*	1030	1635	2	4	795	1171	4	5
80-84*	0	0	0	0	373	615	2	4
85-UP	177	339	0	1	164	409	0	3
TOTALS	49069	52888	205	189	44850	49367	221	249
GRAND TOTAL				102351				94697

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	1094	1124	2218	1044	1103	3165	1082	1014
CV-RENAL	649	640	1289	584	624	1808	568	505
HEART	475	458	933	440	471	1391	438	413
NON CV-R	445	484	929	434	479	1357	514	509
CANCER	176	191	367	165	195	521	213	215
							206	
							634	

STATE
1950 BANK BY POPULATION 104
1950 POP/SQ. MILE 24964
1970 POP/SQ. MILE 21653
1949 MED. FAM. INCOME 3425
1969 MED. FAM. INCOME 9594
URBAN CLASS PRINGE
1950 URBAN AREA RANK 6
JAN MEAN TEMPERATURE 29
JULY MEAN TEMPERATURE 72
MEAN ANN. PRECIPITATION 38
LAND RESOURCE REGION R
WATER SOURCE SURFACE
TOTAL HARDNESS 12 PPM
NON-CARBONATE HARDNESS 6 PPM
FLUORIDATION STATUS NO ARTIFICIAL,LOW NATURAL

CITY CHARACTERISTICS

CODE

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL		1289.0	1808.0	1.076		1289.0	1808.0	1.076
HEART		933.0	1391.0	1.508		933.0	1391.0	1.508
NON CV-R		929.0	1357.0	1.472		929.0	1357.0	1.472
CANCER		367.0	521.0	1.410		367.0	521.0	1.410
		311.7	472.0	1.517		311.7	472.0	1.517
		1.177	1.104	1.341		1.177	1.104	1.341

SPRINGFIELD
-202-

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	1508	1445	86	93	1741	1692	251	235	1154	1078	229	255
1-4	6136	5727	319	318	6964	6737	897	913	4377	4131	1129	1082
5-9	5687	5586	271	238	7597	7412	876	916	6089	5877	1435	1326
10-14	4300	4227	206	218	6814	6489	639	644	6417	6347	1396	1367
15-19	4235	4599	163	203	4806	5269	374	428	5626	6630	1715	1984
20-24	5402	5850	269	347	3938	4297	527	549	4958	5133	676	806
25-29	6410	6845	369	346	4364	4519	552	531	5623	5656	557	741
30-34	6086	6435	295	280	5112	5242	470	445	5953	5298	541	707
35-39	5425	5256	183	191	5206	5242	470	445	5953	5298	541	707
40-44	4765	4561	153	156	4650	4598	367	350	5770	4052	528	661
45-49	4273	4264	153	166	4650	4598	367	350	5770	4052	528	661
50-54	4927	5018	140	156	4927	4857	210	234	4158	4853	379	407
55-59	4663	4993	120	99	3947	4526	170	192	3645	4339	255	328
60-64	3907	4139	97	98	3725	4523	124	146	3186	4115	196	245
65-69	2827	3446	60	100	3356	4286	115	118	2467	3554	158	210
70-74	1858	2515	45	50	2431	3273	72	93	2206	3476	84	148
75-79*	1679	2519	36	46	1397	2181	44	58	1577	2631	63	101
80-84*	0	0	0	0	698	1172	16	37	919	1635	55	73
85-UP	238	471	4	10	350	779	9	17	474	1094	28	55
TOTALS	75120	81008	3065	3206	76525	84177	6446	6915	67277	75241	10006	11381
GRAND TOTAL				162399				174463				163905

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	3807.0 OBSERVED 3239.4 EXPECTED* OBS/EXP	6010.0 5735.1 1.048	5929.0 6116.0 0.969
CV-RENAL	2181.0 OBSERVED 1807.8 EXPECTED* OBS/EXP	3367.0 3252.0 1.035	3177.0 3635.2 0.874
HEART	1613.0 OBSERVED 1295.1 EXPECTED* OBS/EXP	2457.0 2302.2 1.067	2237.0 2522.0 0.887
NON CV-R	1626.0 OBSERVED 1431.6 EXPECTED* OBS/EXP	2643.0 2483.1 1.064	2752.0 2480.8 1.109
CANCER	641.0 OBSERVED 535.2 EXPECTED* OBS/EXP	996.0 907.6 1.097	1072.0 921.1 1.164

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	1959	1960	1961	SUM	59-61
TOTAL	1826	1981	1989	1971	2050	6010	59-61
CV-RENAL	1063	1118	1105	1100	1162	3367	59-61
HEART	792	821	819	806	832	2457	59-61
NON CV-R	763	863	884	871	888	2843	59-61
CANCER	298	343	307	346	343	996	59-61

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANNUAL PRECIPITATION	LAND REUSE REGION	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
MASSACHUSETTS	61	5123	5171	3456	3612	CENTRAL	38	37	71	43	R	12 PPM	6 PPM	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	WF
IT 1	338	321	5	7	433	420	8	14				
1-4	1423	1412	20	22	1647	1609	27	28				
5-9	1549	1456	18	23	1842	1736	30	24				
10-14	1284	1217	21	17	1757	1701	36	23				
15-19	1265	1307	15	10	1443	1457	24	26				
20-24	1324	1522	19	19	1054	1094	20	17				
25-29	1601	1686	23	20	1101	1066	26	22				
30-34	1496	1629	19	26	1173	1268	24	29				
35-39	1365	1462	13	8	1351	1482	25	25				
40-44	1276	1373	9	9	1273	1492	17	17				
45-49	1179	1312	5	13	1232	1369	10	13				
50-54	1132	1296	11	6	1153	1230	12	10				
55-59	1028	1148	10	6	1009	1187	9	13				
60-64	720	995	8	7	925	1102	11	15				
65-69	706	873	4	2	837	936	10	6				
70-74	593	790	4	3	537	774	3	3				
75-79	540	790	5	3	307	571	3	3				
80-84	0	0	0	0	189	312	5	2				
85-UP	81	185	0	0	113	266	2	0				
TOTALS	19017	20679	210	203	19368	21157	307	300				
GRAND TOTAL			40109				41132					

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	888.0	869.7	1.021	1386.0	1430.0	0.965	1295.0	1542.5	0.840
CV-PENAL									
OBSERVED	513.0			858.0			712.0		
EXPECTED*	506.0			835.8			921.3		
OBS/EXP	1.014			1.027			0.773		
HEART									
OBSERVED	373.0			624.0			523.0		
EXPECTED*	358.2			588.8			645.6		
OBS/EXP	1.041			1.060			0.810		
NON CV-R									
OBSERVED	375.0			522.0			583.0		
EXPECTED*	363.6			594.2			623.2		
OBS/EXP	1.031			0.878			0.939		
CANCER									
OBSERVED	144.0			226.0			246.0		
EXPECTED*	139.0			223.7			239.6		
OBS/EXP	1.036			1.010			1.027		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	SUM	1969	1970	1971	SUM	69-71	SUM
TOTALS	436	452	459	449	472	1380	443	438	414	1295		
CV-PENAL	243	270	279	282	297	858	257	238	217	712		
HEART	181	192	210	201	213	624	185	173	165	523		
NON CV-R	193	182	180	167	175	522	186	200	197	583		
CANCER	74	70	84	66	76	226	72	79	95	246		
MASSACHUSETTS												
1950 RANK BY POPULATION												
1950 POP/SQ. MILE												
1970 POP/SQ. MILE												
1949 MED. FAM. INCOME												
1969 MED. FAM. INCOME												
URBAN CLASS												
1950 URBAN AREA RANK												
JAN MEAN TEMPERATURE												
JULY MEAN TEMPERATURE												
MEAN ANN. PRECIPITATION												
LAND RESOURCE REGION												
WATER SOURCE												
TOTAL HARDNESS												
NON-CARBONATE HARDNESS												
FLUORIDATION STATUS												

NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	498	506	1	0	671	684	1	5	497	479	2	8
1-4	2079	1869	5	1	2468	2367	11	9	1920	1788	21	24
5-9	1858	1760	6	2	2627	2497	14	9	2532	2390	15	18
10-14	1522	1463	11	12	2490	2223	18	7	2717	2553	30	28
15-19	1653	1648	10	12	1978	2224	12	14	3053	2885	43	48
20-24	1721	2004	11	10	1673	1941	5	11	3128	3192	58	49
25-29	1934	2153	8	6	1778	1667	7	12	2495	2237	51	45
30-34	1799	1954	10	7	1883	1882	10	11	1606	1526	40	34
35-39	1594	1789	7	2	1817	1883	5	8	1519	1565	23	27
40-44	1527	1715	7	3	1584	1760	2	3	1730	1813	23	14
45-49	1342	1578	4	2	1505	1696	4	2	1694	1855	7	16
50-54	1337	1401	3	6	1492	1721	5	4	1602	1795	7	13
55-59	1042	1217	5	5	1340	1592	2	2	1461	1742	12	9
60-64	907	1056	2	3	1106	1271	2	3	1233	1572	4	6
65-69	714	885	1	1	796	1140	2	2	870	1236	4	13
70-74	438	671	2	0	629	901	2	0	620	1042	3	1
75-79#	480	685	2	1	389	608	0	0	391	779	1	5
80-84#	0	0	0	0	174	371	1	1	242	539	2	1
85-UP	76	158	0	0	128	288	0	1	163	375	0	1
TOTALS	22509	24512	95	71	26528	28676	103	106	29513	31363	346	360
GRAND TOTAL				47187				55413				61582

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL				TOTAL				TOTAL			
CV-RENAL	OBSERVED	850.0	1556.0	1685.0	OBSERVED*	856.3	1649.2	1906.8	OBSERVED	850.0	1556.0	1685.0
	EXPECTED*				OBS/EXP	0.993	0.943	0.884	EXPECTED*			
									OBS/EXP			
HEART	OBSERVED	335.0	618.0	670.0	OBSERVED*	339.0	660.5	782.8	OBSERVED	335.0	618.0	670.0
	EXPECTED*				OBS/EXP	0.988	0.936	0.856	EXPECTED*			
									OBS/EXP			
NON CV-R	OBSERVED	373.0	716.0	834.0	OBSERVED*	380.7	716.0	790.6	OBSERVED	373.0	716.0	834.0
	EXPECTED*				OBS/EXP	0.960	1.000	1.055	EXPECTED*			
									OBS/EXP			
CANCER	OBSERVED	146.0	259.0	335.0	OBSERVED*	138.1	259.2	295.9	OBSERVED	146.0	259.0	335.0
	EXPECTED*				OBS/EXP	1.057	0.999	1.132	EXPECTED*			
									OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1959				1969				1971			
	49-50				59-61				69-71				69-71			
TOTAL	436	414	850	477	523	489	1556	1685	540	553	592	1685	592	592	1685	1685
	247	230	477	477	279	298	840	840	271	285	295	851	295	295	851	851
	179	156	335	335	212	216	716	716	210	228	236	670	236	236	670	670
HEART	189	184	373	373	244	246	716	716	269	268	297	834	297	297	834	834
	85	61	146	146	89	86	259	259	95	108	132	335	132	132	335	335
NON CV-R																
CANCER																

CITY CHARACTERISTICS

CODE

MASSACHUSETTS		WALTHAM	
STATE	249	STATE	249
1950 RANK BY POPULATION	3805	1950 RANK BY POPULATION	3805
1950 POP/SQ. MILE	4927	1950 POP/SQ. MILE	4927
1970 POP/SQ. MILE	3400	1970 POP/SQ. MILE	3400
1949 MED. FAM. INCOME	11523	1949 MED. FAM. INCOME	11523
1969 MED. FAM. INCOME	11523	1969 MED. FAM. INCOME	11523
URBAN CLASS	6	URBAN CLASS	6
1950 URBAN AREA RANK	29	1950 URBAN AREA RANK	29
JAN MEAN TEMPERATURE	72	JAN MEAN TEMPERATURE	72
JULY MEAN TEMPERATURE	38	JULY MEAN TEMPERATURE	38
MEAN ANN. PRECIPITATION	R	MEAN ANN. PRECIPITATION	R
LAND RESOURCE REGION	R	LAND RESOURCE REGION	R
WATER SOURCE	SURFACE	WATER SOURCE	SURFACE
TOTAL HARDNESS	12 PPM	TOTAL HARDNESS	12 PPM
NON-CARBONATE HARDNESS	6 PPM	NON-CARBONATE HARDNESS	6 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF
IT 1	1935	1702	18	22	1786	1681	40	26	1355	1201	61	55	1355	1201	61	55	1355	1201
1-4	7178	7168	75	73	6940	6849	138	118	5050	4795	214	206	5050	4795	214	206	5050	4795
5-9	7581	7306	57	64	7888	7622	138	129	7030	6697	217	241	7030	6697	217	241	7030	6697
10-14	5974	6012	72	75	7267	7321	103	111	7555	7314	212	215	7555	7314	212	215	7555	7314
15-19	6443	6595	75	62	7119	6681	54	87	9440	9142	189	183	9440	9142	189	183	9440	9142
20-24	8023	7575	73	73	5491	5354	76	73	4331	4271	128	133	4331	4271	128	133	4331	4271
25-29	7600	8601	76	65	4646	4713	94	85	3967	3810	131	110	3967	3810	131	110	3967	3810
30-34	7400	8065	58	70	5049	5326	77	95	3450	3975	114	125	3450	3975	114	125	3450	3975
35-39	7219	7556	55	55	5485	6091	75	65	4266	4769	96	105	4266	4769	96	105	4266	4769
40-44	6385	6909	53	63	5723	6518	53	65	4872	5520	87	80	4872	5520	87	80	4872	5520
45-49	5986	6628	36	42	5748	6292	46	53	5456	5936	69	79	5456	5936	69	79	5456	5936
50-54	6016	6686	66	77	4880	5825	46	54	4809	5551	57	71	4809	5551	57	71	4809	5551
55-59	6083	6492	52	58	4817	5432	48	48	4004	5017	51	64	4004	5017	51	64	4004	5017
60-64	5077	5325	32	20	4235	5236	27	32	3328	4595	32	57	3328	4595	32	57	3328	4595
65-69	3811	3323	13	27	3108	3984	30	30	2644	4290	35	37	2644	4290	35	37	2644	4290
70-74	2324	3320	19	23	1937	2683	14	13	2081	3416	23	28	2081	3416	23	28	2081	3416
75-79	2320	3420	0	0	974	1577	8	7	1124	2072	11	22	1124	2072	11	22	1124	2072
80-84	361	678	2	5	500	1009	4	6	665	1436	12	18	665	1436	12	18	665	1436
85-89	97957	103810	856	863	88326	95954	1152	1155	82070	90419	2028	2055	82070	90419	2028	2055	82070	90419
TOTALS																		
GRAND TOTAL																		

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM	1971
TOTAL	2244	2370	4614	2142	2375	2375	6892	2318	2288	2097	6703	2097
CV-RENAL	1322	1384	2706	1289	1382	1408	4079	1306	1319	1208	3833	1208
HEART	982	1059	2041	983	1072	1092	3147	984	1036	928	2946	928
NON CV-R	922	986	1908	853	993	967	2813	1012	969	869	2850	869
CANCER	360	406	766	355	380	419	1154	419	350	378	1187	378

CITY CHARACTERISTICS

STATE	CODE
MASSACHUSETTS	
1920 RANK BY POPULATION	
1920 POP./SQ. MILE	5500
1970 POP./SQ. MILE	4721
1949 MED. FAM. INCOME	3274
1949 MED. FAM. INCOME	10038
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	57
JAN MEAN TEMPERATURE	25
JULY MEAN TEMPERATURE	71
MEAN ANN. PRECIPITATION	43
LAND RESOURCE REGION	R
WATER SOURCE	SUPFACE
TOTAL HARDNESS	9 PPM
NON-CARBONATE HARDNESS	6 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP
TOTAL	4614.0	6992.0	1.101	1.007	6703.0	7241.1
CV-RENAL	2706.0	4079.0	1.137	1.013	3833.0	4421.2
HEART	2380.0	4026.0	1.137	1.013	3833.0	4421.2
NON CV-R	1908.0	2813.0	1.054	0.999	2870.0	2819.8
CANCER	1810.2	2816.1	1.054	0.999	2870.0	2819.8
TOTALS	1810.2	2816.1	1.054	0.999	2870.0	2819.8
GRAND TOTAL	1810.2	2816.1	1.054	0.999	2870.0	2819.8

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					
	WM	WF	NM	NF	NM	NF
LT 1	397	327	42	14	756	61
1-4	1199	1151	99	79	2533	205
5-9	993	1067	80	85	2291	168
10-14	765	737	59	77	1771	157
15-19	2748	2273	114	100	3891	369
20-24	6330	3844	260	147	6215	526
25-29	3390	2248	258	153	3346	334
30-34	1523	1461	152	138	2114	233
35-39	1120	1279	111	109	1780	169
40-44	1040	1208	93	90	1337	132
45-49	944	1090	67	74	1172	104
50-54	865	1054	61	60	1077	111
55-59	800	934	38	57	931	85
60-64	660	834	46	50	752	65
65-69	484	606	40	23	696	57
70-74	310	511	12	18	484	38
75-79	343	637	12	26	616	25
80-84	0	0	0	0	128	20
85-UP	54	120	2	2	86	6
TOTALS	23965	21481	1526	1279	31465	2063
GRAND TOTAL				48251		67340

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	453.0	724.2	0.902	1239.0	1433.0	0.865	1559.0	1909.8	0.816
CV-RENAL	348.0	385.7	0.902	576.0	733.6	0.785	715.0	989.5	0.723
HEART	218.0	271.3	0.803	407.0	518.1	0.786	479.0	685.4	0.699
NON CV-R	305.0	338.4	0.901	563.0	693.4	0.812	844.0	921.2	0.916
CANCER	107.0	111.6	0.959	218.0	211.9	1.029	298.0	275.4	1.082
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	
	MICHIGAN	
STATE	243	
1950 POP./SQ. MILE	7311	
1970 POP./SQ. MILE	4578	
1949 MED. FAM. INCOME	3681	
1969 MED. FAM. INCOME	12819	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	22	
JULY MEAN TEMPERATURE	73	
MEAN ANN. PRECIPITATION	31	
LAND RESOURCE REGION	M	
WATER SOURCE	GROUND AND SURFACE	
TOTAL HARDNESS	80 PPM	
NON-CARBONATE HARDNESS	59 PPM	
FLUORIDATION STATUS	FLOIDATED IN 1951	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	MF	NP	WM	WF	MF	NP	WM	WF	MF	NP
LT 1	512	479	73	56	419	410	122	92	308	309	100	90
1-4	1805	1729	188	181	1514	1477	470	420	1027	985	332	351
5-9	1603	1648	152	152	1721	1743	459	429	1324	1218	497	454
10-14	1258	1388	104	128	1539	1593	341	339	1261	1216	546	529
15-19	1251	1358	104	128	1383	1370	207	213	1236	1408	408	460
20-24	1251	2055	178	190	1034	1207	197	237	1170	1593	242	336
25-29	1840	1998	196	214	1044	1074	183	250	987	1051	180	258
30-34	1735	1693	199	166	1106	1144	225	272	710	680	170	248
35-39	1530	1613	159	176	1130	1228	229	275	591	662	173	252
40-44	1387	1558	124	126	1089	1171	232	196	734	830	208	260
45-49	1267	1341	112	105	1055	1217	158	161	834	940	229	225
50-54	1152	1255	99	89	1034	1182	131	144	835	965	197	204
55-59	1145	1233	77	65	984	1035	90	115	761	937	130	165
60-64	1022	1173	41	43	815	1001	91	78	700	1002	103	134
65-69	767	918	43	55	714	966	72	73	586	761	64	106
70-74	554	731	29	23	589	916	35	49	453	714	71	95
75-79*	501	717	21	18	337	600	30	26	332	672	35	51
80-84*	0	0	0	0	203	347	9	13	200	482	16	43
85-UP	83	141	3	10	90	209	11	11	153	299	13	30
TOTALS	21572	23145	1944	2005	17600	19860	3256	3453	14202	16724	3714	4291
GRAND TOTAL				48666				44169				38931

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1119.0	960.1	1.166		1710.0	1528.7	1.119		1734.0	1583.5	1.095	
CV-RENAL	606.0	528.2	1.147		984.0	868.1	1.134		942.0	945.0	0.997	
HEART	401.0	374.8	1.070		648.0	606.9	1.068		677.0	645.4	1.049	
NON CV-R	513.0	431.8	1.188		726.0	660.6	1.099		792.0	638.5	1.240	
CANCER	139.0	151.7	0.916		271.0	233.1	1.162		274.0	226.5	1.210	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 BANK BY POPULATION	1950 POP/50. MILE	1970 POP/50. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
MICHIGAN	241	4635	3299	942	3559	INDEPENDENT	-	23	73	33	L	GROUND	254 PPM	28 PPM	FLUORIDATED IN 1951

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	574	575	4	2	631	647	9	8	468	377	16	12
1-4	2341	2247	18	12	2449	2420	23	48	1795	1652	38	43
5-9	2367	2268	16	20	2920	2756	42	50	2433	2314	46	62
10-14	1981	1938	14	11	2530	2549	26	30	2591	2627	49	61
15-19	1641	2008	9	14	1982	2144	23	23	2338	2474	51	53
20-24	1815	2186	12	16	1460	1645	16	21	1623	1991	50	40
25-29	1938	2198	8	24	1344	1414	17	28	1440	1398	27	50
30-34	1980	2091	17	17	1477	1600	18	20	1116	1172	31	24
35-39	1878	1958	13	16	1526	1830	20	20	1034	1129	22	10
40-44	1750	1709	10	15	1671	1837	20	18	1221	1304	27	17
45-49	1430	1480	10	11	1688	1642	18	20	1256	1563	17	14
50-54	1243	1294	13	10	1464	1460	10	16	1368	1445	19	22
55-59	1149	1245	9	6	1179	1310	10	7	1095	1233	11	11
60-64	1044	1235	6	3	833	1069	14	7	746	982	7	10
65-69	865	1018	4	3	632	928	5	7	543	856	10	7
70-74	624	693	2	3	497	628	2	2	397	687	2	3
75-79	528	743	1	0	234	337	1	2	231	442	1	2
80-84	0	0	0	0	110	175	0	1	121	266	1	3
85-89	94	145	0	0								
TOTALS	25242	26933	166	182	25514	27482	277	331	23121	25436	433	459
GRAND TOTAL				52523				53604				49449

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1164.0	1805.0	1788.0		1164.0	1805.0	1788.0		1164.0	1805.0	1788.0	
	953.4	1568.7	1593.7		953.4	1568.7	1593.7		953.4	1568.7	1593.7	
	1.221	1.151	1.122		1.221	1.151	1.122		1.221	1.151	1.122	
CV-RENAL	592.0	995.0	983.0		592.0	995.0	983.0		592.0	995.0	983.0	
	528.4	860.8	926.8		528.4	860.8	926.8		528.4	860.8	926.8	
	1.120	1.130	1.034		1.120	1.130	1.034		1.120	1.130	1.034	
HEART	416.0	711.0	698.0		416.0	711.0	698.0		416.0	711.0	698.0	
	377.7	626.8	656.3		377.7	626.8	656.3		377.7	626.8	656.3	
	1.101	1.134	1.068		1.101	1.134	1.068		1.101	1.134	1.068	
NON CV-R	572.0	810.0	805.0		572.0	810.0	805.0		572.0	810.0	805.0	
	425.1	687.9	661.1		425.1	687.9	661.1		425.1	687.9	661.1	
	1.346	1.177	1.218		1.346	1.177	1.218		1.346	1.177	1.218	
CANCER	197.0	327.0	336.0		197.0	327.0	336.0		197.0	327.0	336.0	
	153.2	249.0	249.3		153.2	249.0	249.3		153.2	249.0	249.3	
	1.286	1.313	1.348		1.286	1.313	1.348		1.286	1.313	1.348	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	MICHIGAN	
	STATE	1969-71
1950 RANK BY POPULATION	218	SUM
1950 POP/SQ. MILE	5471	1788
1970 POP/SQ. MILE	4945	349
1949 MED. FAM. INCOME	3456	345
1969 MED. FAM. INCOME	5898	245
URBAN CLASS	INDEPENDENT	260
1950 URBAN AREA RANK	-	118
JAN MEAN TEMPERATURE	23	108
JULY MEAN TEMPERATURE	72	327
MEAN ANN. PRECIPITATION	29	
LAND RESOURCE REGION	L	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	71 PPM	
NON-CARBONATE HARDNESS	43 PPM	
FLUORIDATION STATUS	UNCERTAIN	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970				TOTAL	CAUSE	1949-50	1959-61	1969-71
	WM	FP	NM	NP	WM	FP	NM	NP	WM	FP	NM	NP					
1-4	15795	14877	3751	3821	10865	10343	6446	6495	6462	6274	7743	7680	OBSERVED	33391.0	53284.0	55930.0	
5-9	60421	58052	13161	13124	42144	40377	28067	27631	23897	22902	29306	28895	EXPECTED*	28339.5	50713.1	55662.6	
10-14	88861	57253	12097	12383	49833	47798	31270	31584	30426	28870	36639	36815	OBS/EXP	1.178	1.051	1.005	
15-19	48191	46909	9972	10152	48488	47534	22988	23286	33160	32150	39445	39326					
20-24	45702	48458	8845	9829	38406	41863	14340	16439	33528	33834	32823	35193	CV-FEMAL				
25-29	60026	61202	11766	14520	30879	34560	10427	15431	32128	36427	25114	31590	OBSERVED	16016.0	28193.0	28046.0	
30-34	67273	70607	16248	17718	39617	28910	13900	18121	27156	25219	21479	24389	EXPECTED*	14066.6	26796.6	31031.8	
35-39	63141	66633	14716	16280	33447	34233	17572	20711	16107	16821	16489	20383	OBS/EXP	1.138	1.052	0.904	
40-44	54651	56110	12298	11325	37611	42161	19304	20874	16107	16821	16489	20383					
45-49	55788	52474	11083	9582	39805	45686	16831	17998	25062	29039	18871	21685	HEART				
50-54	54090	48911	8741	7636	37998	40956	15033	14191	27213	32496	16446	17491	OBSERVED	11609.0	20626.0	21340.0	
55-59	49931	41844	5610	4493	39150	38761	10443	9322	26308	30571	13746	14004	EXPECTED*	10197.6	18989.9	21201.0	
60-64	38013	31754	3521	2512	34853	34352	7114	6697	23173	27325	11016	11016	OBS/EXP	1.138	1.086	1.007	
65-69	23425	22033	2283	2437	30528	29527	4914	5062	19901	24061	8203	8741					
70-74	12165	13670	989	1242	19744	20839	2903	3148	16234	21395	5241	5917	NON CV-R				
75-79*	8750	12398	794	1038	10021	11950	1438	1713	12309	16024	2748	3486					
80-84*	0	0	0	0	3761	5725	490	712	6100	8950	1300	1859	OBSERVED	17375.0	25091.0	27890.0	
85-92*	1259	2223	140	226	1735	3261	344	550	3032	5253	923	1471	EXPECTED*	14262.9	23922.5	24630.7	
TOTALS	776137	767910	150479	153242	579616	603354	235533	251641	401518	437359	322350	350255	OBS/EXP	1.218	1.049	1.132	
GRAND TOTAL																	
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* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	DEATHS BY CAUSE AND YEAR					69-71 SUM	1971	1970	1969	59-61 SUM	STAT ¹	CITY CHARACTERISTICS	CODE
	1949	1950	1959	1960	1961								
TOTAL	16635	16756	17545	18067	17672	53284	18614	18416	18900	59530	1950 RANK BY POPULATION	MICHIGAN	5
CV-BENAL	7337	8179	9284	9480	9429	28193	9354	9154	9532	28040	1950 POP/50. MILE	13249	10953
HEART	5770	5839	6785	6909	6929	20626	7162	6975	7203	21300	1970 POP/50. MILE	3955	10045
NON CV-R	8798	8577	8261	8587	8243	25091	9262	9368	9368	27890	1949 MED. FAM. INCOME	10045	CENTRAL
CANCER	2667	2672	3054	3103	3208	9365	3144	3213	3243	3600	1969 MED. FAM. INCOME	26	5
											URBAN CLASS	73	31
											1950 URBAN AREA RANK	LAND RESOURCE REGION	1
											JAN MEAN TEMPERATURE	WATER SOURCE	SURFACE
											MEAN ANN. PRECIPITATION	TOTAL HARDNESS	98 PPM
											LAND RESOURCE REGION	NON-CARBONATE HARDNESS	22 PPM
											WATER SOURCE	FLUORIDATION STATUS	FLUORIDATED

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	363	317	3	3	352	346	3	5
1-4	1452	1221	12	12	1281	1186	11	7
5-9	1359	1373	13	7	1456	1497	9	7
10-14	1139	1083	11	11	1550	1408	9	7
15-19	857	1010	6	7	1323	1347	13	7
20-24	1095	1115	6	7	1327	1212	3	8
25-29	1210	1311	5	7	883	1012	3	5
30-34	1143	1258	7	8	889	917	6	5
35-39	1075	1204	3	7	892	918	2	3
40-44	1062	1181	3	4	1042	1154	3	3
45-49	935	982	6	4	963	1181	4	3
50-54	719	659	3	7	1022	1169	3	8
55-59	514	467	2	1	1004	1048	2	1
60-64	302	326	1	0	964	873	2	8
65-69	155	195	0	2	738	728	5	2
70-74	138	208	1	1	544	625	1	1
75-79*	0	0	0	0	347	376	2	2
80-84*	18	38	0	0	153	250	0	1
85-89	0	0	0	0	52	95	0	0
TOTALS	14747	14753	91	84	15268	15938	70	71
GRAND TOTAL				29675				31347

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	49-50 SUM	59-61 SUM	1959	1960	1961	69-71 SUM
TOTAL	224	219	443		269	270	254	693
CV-RENAL	121	123	244		152	130	130	412
NON-CV-R	87	86	173		102	191	97	390
CANCER	103	96	199		117	140	124	381
	22	25	47		53	63	55	171

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	DEATHS AND DEATH RATIOS BY CAUSE AND CENSUS PERIOD			
	1949-50	1959-61	1969-71	
TOTAL	OBSERVED 443.0	793.0	933.0	
	EXPECTED* 379.2	774.9	985.6	
	OBS/EXP 1.168	1.023	0.947	
CV-RENAL	OBSERVED 244.0	412.0	495.0	
	EXPECTED* 185.7	407.3	565.6	
	OBS/EXP 1.314	1.012	0.875	
HEART	OBSERVED 173.0	290.0	368.0	
	EXPECTED* 136.9	299.9	404.1	
	OBS/EXP 1.264	0.967	0.911	
NON CV-R	OBSERVED 199.0	381.0	438.0	
	EXPECTED* 193.5	367.6	420.0	
	OBS/EXP 1.028	1.036	1.043	
CANCER	OBSERVED 47.0	171.0	198.0	
	EXPECTED* 64.1	135.5	162.0	
	OBS/EXP 0.733	1.262	1.223	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CITY CHARACTERISTICS	CODE	MICHIGAN	
		STATE	1950
STATE		1950	POPULATION
1950 POP/50. MILE		8020	408
1970 POP/50. MILE		7910	7910
1949 MED. FAM. INCOME		4337	4337
1969 MED. FAM. INCOME		11525	11525
URBAN CLASS		5	5
1950 URBAN AREA RANK		26	26
JAN MEAN TEMPERATURE		73	73
JULY MEAN TEMPERATURE		31	31
MEAN ANN. PRECIPITATION		1	1
LAND RESOURCE REGION		1	1
WATER SOURCE		98	98
TOTAL HARDNESS		22	22
NON-CARBONATE HARDNESS		98	98
FLUORIDATION STATUS		22	22
FLUORIDATED IN 1967			

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	WM	NF	WM	WF	NM	NF	WM	NF
LT 1	1853	1803	101	105	1935	1838	260	1498	1405	303	352	
5-9	6866	6571	332	342	6878	7026	990	5633	5395	1395	1324	
10-14	5311	5360	251	242	8078	7825	1017	7812	7546	1709	1823	
15-19	5268	6034	207	252	7053	6914	755	8319	8138	1590	1528	
20-24	6301	7222	308	357	5693	6601	528	8612	9233	1147	1247	
25-29	6382	6890	331	404	4782	5821	386	7070	8951	770	1132	
30-34	5868	6445	340	304	4353	4351	470	5163	5277	766	853	
35-39	5795	6201	262	263	4382	4810	518	3815	3937	557	697	
40-44	5341	5873	238	254	4639	5091	460	3557	3804	571	709	
45-49	4973	5299	219	190	4475	5173	414	4258	4752	572	638	
50-54	4690	5080	170	172	4605	5068	355	4623	5146	461	516	
55-59	4431	4969	126	94	4273	4818	285	4438	5142	410	461	
60-64	3870	4249	93	65	3889	4357	248	4242	4931	352	363	
65-69	3062	3654	73	79	3411	4112	166	3679	4608	233	285	
70-74	2123	2745	45	47	3055	4162	126	2882	4055	198	234	
75-79*	1995	2746	20	45	2439	3378	79	2320	3617	103	164	
80-84*	0	0	0	0	1534	2454	53	1788	3054	86	82	
85-UP	336	583	4	5	830	1459	30	1133	2054	32	54	
TOTALS	81127	88451	3433	3504	76703	85832	7171	81448	92577	11327	12297	
GRAND TOTAL				176515							197649	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	3878.0	6240.0	6.23	6240.0	5995.0	1.041	6933.0	7427.7	0.957
CV-RENAL	2107.0	3466.0	0.608	3466.0	3266.0	1.061	3755.0	4317.6	0.870
HEART	1449.0	2264.0	0.640	2264.0	2408.7	0.940	2656.0	2980.7	0.891
NON CV-R	1771.0	2774.0	0.638	2774.0	2568.4	1.080	3178.0	2925.1	1.086
CANCER	690.0	1014.0	0.681	1014.0	923.9	1.098	1199.0	1061.1	1.130

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949			1950			49-50			59-61			69-71		
	1949	1950	SUM	1949	1950	SUM	1949	1950	SUM	1949	1950	SUM	1949	1950	SUM
TOTAL	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
CV-RENAL	1041	1066	2107	1041	1066	2107	1041	1066	2107	1041	1066	2107	1041	1066	2107
HEART	733	716	1449	733	716	1449	733	716	1449	733	716	1449	733	716	1449
NON CV-R	917	854	1771	917	854	1771	917	854	1771	917	854	1771	917	854	1771
CANCER	349	341	690	349	341	690	349	341	690	349	341	690	349	341	690
STATE	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
1950 POP/1000	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
1970 POP/1000	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
1949 MED. FAM. INCOME	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
1969 MED. FAM. INCOME	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
URBAN CLASS	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
1950 URBAN AREA RANK	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
JAN MEAN TEMPERATURE	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
JULY MEAN TEMPERATURE	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
MEAN ANN. PRECIPITATION	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
LAND RESOURCE REGION	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
WATER SOURCE	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
TOTAL HARDNESS	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
NON-CARBONATE HARDNESS	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
FLUORIDATION STATUS	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878
FLUORIDATED IN 1945	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878	1958	1920	3878

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	374	397	67	57	277	270	84	61	191	193	27	39
1-4	1514	1503	236	216	1060	1017	290	288	677	623	132	151
5-9	1435	1403	213	243	1027	1155	327	313	638	655	171	169
10-14	1095	998	202	191	1106	1077	270	231	773	791	188	204
15-19	909	1077	188	195	838	947	160	185	859	988	144	176
20-24	1432	1653	191	249	744	858	119	145	943	1110	108	154
25-29	2130	2101	258	249	727	761	157	165	747	629	90	110
30-34	2364	2181	192	203	867	803	164	223	462	407	59	94
35-39	1759	1377	201	202	1071	1101	177	166	402	431	76	71
40-44	1075	869	161	162	1279	1290	158	172	577	635	75	124
45-49	711	771	144	140	1134	947	153	143	864	943	110	99
50-54	1004	1065	98	90	840	763	117	121	1067	1178	82	104
55-59	1692	1389	84	68	691	711	101	80	962	891	94	83
60-64	1461	860	53	38	664	778	65	75	594	629	70	87
65-69	775	484	38	43	1122	1043	64	57	383	483	64	71
70-74	296	183	21	18	835	618	28	28	364	628	34	42
75-79*	111	131	13	16	365	238	15	16	596	678	13	39
80-84*	0	0	0	0	92	75	5	8	312	313	16	14
85-UP	14	18	1	3	24	44	3	4	114	110	6	15
TOTALS	20151	18460	2361	2383	14763	14436	2457	2481	11525	12315	1559	1846
GRAND TOTAL				43355				34137				27245

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 775.0 EXPECTED* 609.5 OBS/EXP 1.272	1310.0 1123.4 1.166	1310.0 1286.4 1.018
CV-RENAL	OBSERVED 342.0 EXPECTED* 292.1 OBS/EXP 1.171	704.0 612.8 1.149	751.0 781.6 0.961
HEART	OBSERVED 245.0 EXPECTED* 220.0 OBS/EXP 1.114	520.0 445.9 1.166	610.0 543.5 1.122
NON CV-R	OBSERVED 433.0 EXPECTED* 317.4 OBS/EXP 1.364	606.0 510.6 1.187	559.0 508.8 1.107
CANCER	OBSERVED 136.0 EXPECTED* 107.7 OBS/EXP 1.263	224.0 191.0 1.173	216.0 196.4 1.100

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	
TOTAL	399	376	775	1310	438	442	430	1310	MICHIGAN
CV-RENAL	172	170	342	704	234	264	243	751	1950 RANK BY POPULATION 273
HEART	127	118	245	520	190	214	206	610	1950 POP/50. MILE 26645
NON CV-R	227	206	433	606	194	178	187	559	1970 POP/50. MILE 12974
CANCER	74	62	136	224	72	72	72	216	1949 MED. FAM. INCOME 3705
									1969 MED. FAM. INCOME 9395
									URBAN CLASS FRINGE
									1950 URBAN AREA RANK 5
									JAN MEAN TEMPERATURE 26
									JULY MEAN TEMPERATURE 73
									MEAN ANN. PRECIPITATION 31
									LAND RESOURCE REGION L
									WATER SOURCE SURFACE
									TOTAL HARDNESS 98 PPM
									NON-CARBONATE HARDNESS 22 PPM
									FLUORIDATION STATUS FLUORIDATED IN 1967

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	503	462	35	43	497	515	71	78	378	346	62	58
1-4	1889	1842	121	151	2000	1941	314	290	1344	1344	306	339
5-9	1917	1861	111	122	2369	2213	335	301	1916	1740	398	382
10-14	1542	1477	122	93	2039	2039	219	282	1910	1863	425	416
15-19	1335	1590	86	100	1560	1755	154	168	1733	1846	312	297
20-24	1516	1822	91	102	1192	1284	121	161	1424	1787	187	274
25-29	1731	1961	109	123	1164	1189	138	177	1278	1177	163	197
30-34	1749	1750	93	117	1261	1274	148	146	856	871	149	162
35-39	1650	1751	110	130	1355	1547	149	158	819	826	139	180
40-44	1587	1661	121	97	1358	1441	124	142	967	1000	132	172
45-49	1523	1586	89	97	1314	1405	134	132	971	1171	147	155
50-54	1433	1507	66	73	1201	1336	118	116	1070	1164	129	136
55-59	1395	1480	64	56	1085	1272	86	92	967	1127	103	115
60-64	1171	1335	52	40	1059	1199	71	72	799	1045	105	107
65-69	950	1145	29	30	936	1149	38	41	650	965	72	98
70-74	608	832	28	19	699	1041	34	35	556	858	51	82
75-79*	599	905	13	17	482	745	22	39	377	746	27	45
80-84*	0	0	0	0	218	419	12	5	254	512	35	56
85-89	84	168	4	7	118	260	8	5	142	384	26	62
TOTALS	23182	25105	1344	1417	21960	24024	2296	2440	18411	20772	2968	3333
GRAND TOTAL				51088				50720				43484

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1300.0	1303.0	1.000		1300.0	1303.0	1.000		1300.0	1303.0	1.000	
CV-RENAL	680.0	1054.0	0.645		680.0	1054.0	0.645		680.0	1054.0	0.645	
HEART	434.0	719.0	0.603		434.0	719.0	0.603		434.0	719.0	0.603	
NON CV-R	620.0	849.0	0.730		620.0	849.0	0.730		620.0	849.0	0.730	
CANCER	199.0	331.0	0.598		199.0	331.0	0.598		199.0	331.0	0.598	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				1959				1960				1961				1969				1970				1971				1972			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	660	640	1300	1344	660	640	1300	1344	660	640	1300	1344	660	640	1300	1344	660	640	1300	1344	660	640	1300	1344	660	640	1300	1344	660	640	1300	1344	660	640	1300	1344
CV-RENAL	341	339	680	680	341	339	680	680	341	339	680	680	341	339	680	680	341	339	680	680	341	339	680	680	341	339	680	680	341	339	680	680	341	339	680	680
HEART	221	213	434	434	221	213	434	434	221	213	434	434	221	213	434	434	221	213	434	434	221	213	434	434	221	213	434	434	221	213	434	434	221	213	434	434
NON CV-R	319	301	620	620	319	301	620	620	319	301	620	620	319	301	620	620	319	301	620	620	319	301	620	620	319	301	620	620	319	301	620	620	319	301	620	620
CANCER	91	108	199	199	91	108	199	199	91	108	199	199	91	108	199	199	91	108	199	199	91	108	199	199	91	108	199	199	91	108	199	199	91	108	199	199

CITY CHARACTERISTICS

STATE	MICHIGAN			
	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1970 MED. FAM. INCOME
STATE	228	4251	4251	3660
1950 URBAN AREA RANK	24	3660	3660	3660
JAN MEAN TEMPERATURE	73	3660	3660	3660
JULY MEAN TEMPERATURE	32	3660	3660	3660
MEAN ANN. PRECIPITATION	32	3660	3660	3660
LAND RESOURCE REGION	L	3660	3660	3660
WATER SOURCE	GROUND	3660	3660	3660
TOTAL HARDNESS	331 PPM	3660	3660	3660
NON-CARBONATE HARDNESS	58 PPM	3660	3660	3660
FLUORIDATION STATUS	FLUORIDATED IN 1951	3660	3660	3660

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	544	561	26	39	836	870	106	72	679	683	114	122
1-4	1978	1844	139	106	3116	2980	336	384	2154	2042	445	448
5-9	1824	1716	118	120	3416	3290	382	396	2634	2494	619	580
10-14	1516	1449	87	100	3014	2985	275	260	2772	2687	520	545
15-19	1605	2172	71	91	3235	4133	201	239	4924	5631	492	579
20-24	2685	3089	108	116	3632	3795	204	215	6266	7352	459	540
25-29	2315	2211	110	115	2319	2150	180	214	2721	2508	327	390
30-34	1726	1944	124	107	2075	2235	187	213	1583	1607	243	266
35-39	1696	1883	98	96	2327	2527	157	152	1434	1485	212	220
40-44	1687	1866	100	82	2033	2269	146	169	1534	1728	198	227
45-49	1655	1773	79	74	1960	2168	126	123	1650	1949	186	176
50-54	1516	1750	65	51	1938	2137	113	85	1597	1880	159	156
55-59	1478	1644	47	35	1611	1895	80	80	1451	1615	122	103
60-64	1334	1505	35	24	1469	1615	61	71	1408	1436	96	98
65-69	1115	1310	41	31	1247	1692	48	60	1135	1402	76	49
70-74	751	936	20	22	967	1074	30	32	735	1302	42	39
75-79*	761	1060	22	14	527	974	19	30	563	1052	35	39
80-84*	0	0	0	0	355	589	11	8	350	702	10	24
85-UP	134	209	1	7	184	371	8	13	239	561	9	16
TOTALS	26320	28862	1291	1231	36410	40178	2696	2805	35817	40647	4373	4718
GRAND TOTAL				57704				82089				85555

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1327.0	2344.0	0.566	1266.9	2556.9	0.494	1327.0	2557.0	0.519
CV-RENAL	755.0	1318.0	0.573	724.5	1494.8	0.484	755.0	1477.0	0.512
HEART	515.0	866.0	0.595	513.7	1019.1	0.504	515.0	841.0	0.612
NON CV-R	572.0	1026.0	0.558	542.0	1106.8	0.489	572.0	1080.0	0.529
CANCER	169.0	360.0	0.469	201.5	392.7	0.513	169.0	402.0	0.420
	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	MICHIGAN	
		STATE	1950
1950 POP/1000	203	1950 POP/1000	203
1950 POP/1000	6557	1950 POP/1000	6557
1950 POP/1000	3492	1950 POP/1000	3492
1950 POP/1000	3593	1950 POP/1000	3593
1950 POP/1000	9852	1950 POP/1000	9852
1950 POP/1000	18	1950 POP/1000	18
1950 POP/1000	24	1950 POP/1000	24
1950 POP/1000	72	1950 POP/1000	72
1950 POP/1000	35	1950 POP/1000	35
1950 POP/1000	1	1950 POP/1000	1
1950 POP/1000	340	1950 POP/1000	340
1950 POP/1000	70	1950 POP/1000	70
1950 POP/1000	PPM	1950 POP/1000	PPM
1950 POP/1000	FLUORIDATED IN 1951	1950 POP/1000	FLUORIDATED IN 1951

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	379	398	0	0	714	650	1	3	441	410	2	4
1-4	1622	1539	1	0	2795	2792	5	3	1698	1625	7	6
5-9	1528	1382	0	0	3502	3474	4	1	2517	2491	10	13
10-14	1110	1091	1	2	2915	2852	3	3	2859	2910	14	4
15-19	871	1070	0	0	1745	1808	1	0	2729	2858	7	8
20-24	1181	1373	1	0	1206	1591	1	2	2075	2309	12	11
25-29	1549	1658	1	2	1539	1759	2	5	1700	1597	4	8
30-34	1429	1412	0	3	2135	2401	2	3	1251	1394	7	10
35-39	1223	1158	0	0	2422	2854	3	4	1260	1466	9	13
40-44	967	927	0	0	2006	1950	2	1	1775	2000	9	14
45-49	831	777	0	0	1634	1502	1	1	1385	2089	9	11
50-54	767	642	1	0	1251	1160	2	3	1352	1703	4	2
55-59	550	408	0	0	758	743	1	0	927	979	7	4
60-64	353	289	0	0	469	523	1	0	579	743	7	4
65-69	194	184	0	0	326	352	0	0	462	564	3	1
70-74	101	109	1	1	137	172	2	1	243	342	1	0
75-79	83	111	0	0	137	172	0	0	129	177	1	0
80-84	0	0	0	0	57	80	0	1	54	85	1	0
85-89	11	6	0	0	27	39	0	0				
TOTALS	14755	14544	6	5	26637	27234	31	31	25679	27088	113	104
GRAND TOTAL				29310				53933				52984

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	258.0	278.7	0.962	934.0	877.1	1.065	1158.0	1150.3	1.007
CV-RENAL									
OBSERVED	119.0			410.0			588.0		
EXPECTED*	119.1			403.6			606.9		
OBS/EXP	0.999			1.016			0.969		
HEART									
OBSERVED	90.0			305.0			466.0		
EXPECTED*	89.3			300.5			443.2		
OBS/EXP	1.008			1.015			1.051		
NON CV-R									
OBSERVED	149.0			524.0			570.0		
EXPECTED*	159.6			473.5			543.4		
OBS/EXP	0.934			1.107			1.049		
CANCER									
OBSERVED	47.0			181.0			240.0		
EXPECTED*	45.7			147.8			198.8		
OBS/EXP	1.029			1.225			1.207		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	1959	1960	1961	1960	1961	SUM	1971	1970	SUM	SUM
TOTAL	115	153	338	295	301	295	301	934	359	389	1158	1158
CV-RENAL	53	66	156	117	137	156	137	410	200	206	588	588
HEART	44	46	115	86	104	115	104	305	163	146	466	466
NON CV-R	62	87	182	178	164	182	164	524	159	207	570	570
CANCER	21	26	56	57	68	56	68	181	71	84	240	240

CITY CHARACTERISTICS

STATE	MICHIGAN		CODE
	1950 RANK BY POPULATION	1950 RANK BY POPULATION	
1950 POP/50. MILE	415	415	
1970 POP/50. MILE	4368	4368	
1970 MED. FAM. INCOME	8572	8572	
1965 MED. FAM. INCOME	12131	12131	
URBAN MED. FAM. INCOME	12131	12131	
1950 URBAN AREA RANK	26	26	
JAN. MEAN TEMPERATURE	73	73	
JULY MEAN TEMPERATURE	31	31	
MEAN ANN. PRECIPITATION	31	31	
LAND RESOURCE REGION	1	1	
WATER SOURCE	SURFACE	SURFACE	
TOTAL HARDNESS	98 PPM	98 PPM	
NON-CARBONATE HARDNESS	22 PPM	22 PPM	
FLUORIDATION STATUS	FLUORIDATED	FLUORIDATED	

FLUORIDATED IN 1967

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960		
	WM	WF	NM	WM	WF	NM
LT 1	513	519	24	475	456	51
1-4	1982	2010	82	1871	1772	252
5-9	2061	1959	66	2081	2020	275
10-14	1668	1737	60	1963	1942	170
15-19	1590	1728	35	1550	1894	109
20-24	1482	1832	78	91	1313	83
25-29	1719	1874	107	1213	1068	108
30-34	1613	1737	113	1658	1188	121
35-39	1562	1691	141	1277	1362	146
40-44	1542	1569	92	1243	1452	142
45-49	1428	1455	80	1386	1350	145
50-54	1350	1344	62	1146	1300	98
55-59	1228	1213	28	1195	1184	81
60-64	1019	1053	21	994	1113	61
65-69			15	821	974	32
70-74	510	563	17	547	778	23
75-79*	469	627	4	577	778	20
80-84**	0	0	0	363	549	6
85-89	84	110	1	108	165	3
TOTALS	22521	23919	1016	20545	22125	1882
GRAND TOTAL			9829			1933
			48429			46485

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* * * * * ** SPE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	717	689	89	88	830	796	231	228	776	748	345	350
1-4	2675	2623	375	354	3244	3145	907	959	2655	2685	1251	1208
5-9	2635	2709	284	311	3242	3264	1001	1072	3080	2849	1545	1499
10-14	2359	2309	230	235	2877	2795	709	687	2770	2601	1458	1508
15-19	2119	2466	210	229	2337	2557	409	464	2392	2687	1193	1253
20-24	2699	2878	303	383	1996	2469	303	461	3031	3471	945	1143
25-29	2980	2872	395	357	2235	2233	463	554	2631	3281	853	944
30-34	2391	2510	310	338	2294	2183	548	601	1595	1516	642	711
35-39	2501	2539	310	293	2172	2272	539	473	1378	1417	502	680
40-44	2564	2451	273	287	1911	2174	391	429	1619	1521	594	662
45-49	2361	2153	256	201	2040	2193	365	344	1461	1643	309	453
50-54	1960	1879	191	134	2014	2076	283	268	1467	1643	309	453
55-59	1771	1500	135	96	1849	1812	291	289	1389	1549	306	304
60-64	1338	1236	73	67	1034	1242	131	136	1309	1475	240	302
65-69	873	1032	18	20	1034	1242	131	99	1053	1241	205	197
70-74	543	684	24	26	770	959	61	70	759	1034	115	130
75-79	543	737	24	26	472	707	32	46	427	728	71	72
80-84	0	0	0	0	199	377	10	19	216	445	29	48
85-89	77	140	3	7	146	229	8	12	155	319	21	50
TOTALS	33212	33492	3533	3444	33276	34980	6841	7136	30061	31799	11354	12065
GRAND TOTAL				73681				82233				85279

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1177.0	2092.0	2461.0		1177.0	2092.0	2461.0		1177.0	2092.0	2461.0	
CV-RENAL	578.0	1085.0	1160.0		578.0	1085.0	1160.0		578.0	1085.0	1160.0	
HEART	387.0	796.0	809.0		387.0	796.0	809.0		387.0	796.0	809.0	
MON CV-R	599.0	1007.0	1301.0		599.0	1007.0	1301.0		599.0	1007.0	1301.0	
CANCER	176.0	360.0	398.0		176.0	360.0	398.0		176.0	360.0	398.0	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	577	600	1177	690	723	679	2092	2461	829	802	830	2461
CV-RENAL	288	290	578	352	384	349	1085	1160	400	378	382	1160
HEART	184	203	387	263	287	246	796	809	274	252	273	809
MON CV-R	289	310	599	338	339	330	1007	1206	429	424	448	1301
CANCER	91	85	176	128	115	117	360	398	131	128	139	398

CITY CHARACTERISTICS

CODE

STATE	1950 POP/1000	1970 POP/1000	1990 POP/1000
ALABAMA	157	157	157
ALASKA	3721	3721	3721
ARIZONA	4329	4329	4329
ARKANSAS	3691	3691	3691
CALIFORNIA	127	127	127
CENTRAL	23	23	23
CONNECTICUT	71	71	71
DELAWARE	1	1	1
FLORIDA	292	292	292
GEORGIA	14	14	14
ILLINOIS	14	14	14
INDIANA	14	14	14
IOWA	14	14	14
KANSAS	14	14	14
KENTUCKY	14	14	14
LOUISIANA	14	14	14
MAINE	14	14	14
MARYLAND	14	14	14
MASSACHUSETTS	14	14	14
MICHIGAN	14	14	14
MINNESOTA	14	14	14
MISSISSIPPI	14	14	14
MISSOURI	14	14	14
MONTANA	14	14	14
NEBRASKA	14	14	14
NEVADA	14	14	14
NEW HAMPSHIRE	14	14	14
NEW JERSEY	14	14	14
NEW YORK	14	14	14
NORTH CAROLINA	14	14	14
NORTH DAKOTA	14	14	14
OHIO	14	14	14
OKLAHOMA	14	14	14
OREGON	14	14	14
PENNSYLVANIA	14	14	14
RHODE ISLAND	14	14	14
SOUTH CAROLINA	14	14	14
SOUTH DAKOTA	14	14	14
TENNESSEE	14	14	14
TEXAS	14	14	14
UTAH	14	14	14
VERMONT	14	14	14
VIRGINIA	14	14	14
WASHINGTON	14	14	14
WEST VIRGINIA	14	14	14
WISCONSIN	14	14	14
WYOMING	14	14	14

GROUND AND SURFACE
292 PPM
14 PPM
NON-CARBONATE HARDNESS
FLUORIDATION STATUS
FLUORIDATED IN 1967

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	382	392	11	17	364	402	28	21	316	319	24	24
1-4	1454	1408	78	68	1569	1537	96	79	1213	1123	97	91
5-9	1495	1526	63	63	1857	1762	102	116	1722	1588	138	138
10-14	1219	1264	68	43	1601	1592	85	84	1765	1701	140	117
15-19	1024	1251	54	56	1173	1454	56	60	1702	1705	100	118
20-24	1164	1436	57	37	1185	1465	39	32	1761	1739	79	82
25-29	1319	1452	42	57	866	969	31	49	985	1073	53	86
30-34	1249	1316	54	64	1064	1117	52	46	730	798	43	35
35-39	1147	1249	45	63	1054	1191	47	50	747	788	47	57
40-44	1116	1107	49	38	1072	1107	41	57	893	1017	48	57
45-49	970	1028	50	56	942	1032	40	58	942	1080	47	45
50-54	912	967	40	26	919	986	42	38	831	978	24	48
55-59	842	875	28	22	814	913	40	46	751	914	43	46
60-64	696	842	16	16	703	802	31	25	710	836	34	32
65-69	563	675	11	18	571	745	29	20	501	756	28	39
70-74	449	507	11	12	456	676	15	22	409	625	21	29
75-79	369	513	12	14	274	424	8	5	280	498	7	16
80-84	0	0	0	0	169	267	4	6	150	358	6	11
85-UP	88	98	0	2	96	166	4	4	121	240	5	7
TOTALS	16458	17906	689	672	16309	18167	790	818	15959	17804	974	1057
GRAND TOTAL				35725				36084				35794

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	848.0	1317.0	1.338.0		848.0	1317.0	1.338.0		848.0	1317.0	1.338.0	
CV-RENAL	687.8	1159.8	1.238.4		687.8	1159.8	1.238.4		687.8	1159.8	1.238.4	
HEART	1.233	1.136	1.080		1.233	1.136	1.080		1.233	1.136	1.080	
NON CV-R	424.0	796.0	1.873.0		424.0	796.0	1.873.0		424.0	796.0	1.873.0	
CANCER	383.1	665.2	1.734.6		383.1	665.2	1.734.6		383.1	665.2	1.734.6	
	1.107	1.197	0.998		1.107	1.197	0.998		1.107	1.197	0.998	
	301.0	540.0	1.800.0		301.0	540.0	1.800.0		301.0	540.0	1.800.0	
	272.4	468.1	1.715.4		272.4	468.1	1.715.4		272.4	468.1	1.715.4	
	1.105	1.154	0.954		1.105	1.154	0.954		1.105	1.154	0.954	
	424.0	521.0	1.229.0		424.0	521.0	1.229.0		424.0	521.0	1.229.0	
	304.7	494.6	1.624.8		304.7	494.6	1.624.8		304.7	494.6	1.624.8	
	1.392	1.053	1.261		1.392	1.053	1.261		1.392	1.053	1.261	
	107.0	202.0	1.885.0		107.0	202.0	1.885.0		107.0	202.0	1.885.0	
	109.3	180.2	1.647.0		109.3	180.2	1.647.0		109.3	180.2	1.647.0	
	0.979	1.121	1.137.0		0.979	1.121	1.137.0		0.979	1.121	1.137.0	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

CAUSE	1949				1959				1969				1971				1970				1969-71			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	SUM	SUM	SUM	SUM
TOTAL	423	425	848	425	429	449	439	1317	453	443	442	1338	442	443	442	1338	442	443	442	1338	442	443	442	1338
CV-RENAL	189	235	424	235	264	264	268	796	256	244	233	733	233	244	233	733	233	244	233	733	233	244	233	733
HEART	124	177	301	177	175	187	178	540	174	154	158	486	158	154	158	486	158	154	158	486	158	154	158	486
NON CV-R	234	190	424	190	165	185	171	521	197	199	209	605	209	199	209	605	209	199	209	605	209	199	209	605
CANCER	54	53	107	53	57	75	70	202	78	79	78	235	78	79	78	235	78	79	78	235	78	79	78	235

STATE 1950 RANK BY POPULATION 338 MICHIGAN
1950 POP/50. MILE 4763
1970 POP/50. MILE 4773
1949 MED. FAM. INCOME 3472
1969 MED. FAM. INCOME 3472
URBAN CLASS 9792
1950 URBAN AREA RANK -
JAN MEAN TEMPERATURE 23
JULY MEAN TEMPERATURE 77
MEAN ANN. PRECIPITATION 29
LAND RESOURCE REGION 1
SURFACE WATER SOURCE 94 PPM
TOTAL HARDNESS 18 PPM
NON-CARBONATE HARDNESS 18 PPM
FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	WP	WM	WF	NM	WP	WM	WF	NM	WP
1T-1	648	647	2	0	1050	1030	1	5	707	667	5	5
1-4	2583	2490	3	3	4294	4170	9	16	2649	2607	16	15
5-9	2436	2184	1	1	5168	4880	5	7	4014	3810	14	10
10-14	1617	1554	2	3	4035	4010	3	4	4629	4446	26	6
15-19	1292	1360	1	0	2533	2642	2	2	4127	4029	9	13
20-24	1551	1955	5	2	1663	2201	3	4	2877	3765	9	19
25-29	2240	2447	6	5	2358	2592	1	13	3306	3200	12	19
30-34	2218	2241	3	3	3091	3426	8	13	2262	2318	29	22
35-39	1793	1799	3	4	3383	3540	12	8	2081	2184	13	16
40-44	1598	1643	1	2	2943	2972	4	7	2571	2897	9	12
45-49	1401	1361	1	2	2237	2298	2	2	2750	3179	15	11
50-54	1226	1099	3	1	1901	1943	0	1	2540	2820	8	10
55-59	956	953	0	2	1630	1601	0	0	1980	2174	5	3
60-64	697	689	1	4	1182	1266	1	2	1550	1865	1	0
65-69	434	503	1	0	829	1034	2	2	1098	1432	0	1
70-74	267	327	0	1	551	722	1	1	788	1182	5	4
75-79*	200	319	0	0	270	461	0	1	516	857	0	1
80-84*	0	0	0	0	133	229	0	0	275	550	1	1
85-UP	39	62	1	1	62	140	0	0	142	318	1	1
TOTALS	23196	23633	34	35	39313	41157	54	88	40862	44300	178	159
GRAND TOTAL				46898				80612				85499

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1971				69-71	
	1949	1950	SUM	49-50	1959	1960	1961	59-61	1969	1970	1971	SUM	1971	SUM	1971	SUM	69-71	SUM
TOTAL	258	318	576		500	467	453	1420	622	661	607	1890	607	1890	607	1890		
CV-RENAL	136	162	298		265	254	254	773	309	367	323	999	323	999	323	999		
HEART	92	114	206		209	186	189	584	255	263	247	765	247	765	247	765		
NON CV-R	122	156	278		235	213	199	647	313	294	284	891	284	891	284	891		
CANCER	43	52	95		86	87	75	248	124	124	128	376	128	376	128	376		

CITY CHARACTERISTICS

CODE

STATE	MICHIGAN
1950 RANK BY POPULATION	250
1950 POP/SQ. MILE	3908
1970 POP/SQ. MILE	7308
1949 MED. FAM. INCOME	4633
1969 MED. FAM. INCOME	13619
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	5
JAN MEAN TEMPERATURE	26
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	31
LAND RESOURCE REGION	L
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	162 PPM
NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	963	905	124	133	986	1068	276	307	653	619	291	315
1-4	3682	3506	458	405	3845	3728	1273	1227	2504	2283	1135	1213
5-9	3778	3633	378	363	4190	4204	1263	1247	3334	3169	1566	1500
10-14	3226	3190	314	270	3868	3537	886	845	3486	3479	1600	1655
15-19	2755	3135	264	306	2785	3203	465	504	3182	3413	1274	1374
20-24	2856	3463	397	460	2107	2685	344	520	2525	3026	890	1093
25-29	3235	3523	541	467	2405	2820	552	657	2141	2173	693	747
30-34	3049	3245	451	420	2373	2394	739	722	1716	1638	488	680
35-39	2987	3179	417	372	2447	2620	609	577	1468	1670	546	627
40-44	2869	2825	355	319	2376	2619	493	460	1729	1774	645	697
45-49	2521	2430	321	211	2460	2604	458	370	1796	2032	511	500
50-54	2117	2272	256	147	2251	2366	350	277	1852	2140	386	388
55-59	1964	2269	142	84	1988	2077	284	239	1798	2036	359	309
60-64	1658	1878	65	46	1541	1842	181	152	1512	1767	256	284
65-69	1364	1523	38	47	1332	1666	115	104	1122	1504	216	198
70-74	964	1127	20	25	1053	1447	53	52	787	1267	133	138
75-79*	841	1129	16	24	664	1014	24	34	544	1090	59	56
80-84*	0	0	0	0	334	570	9	12	334	696	33	34
85-UP	147	239	7	8	175	325	4	12	188	455	23	35
TOTALS	40976	43271	4564	4107	39180	42389	8378	8318	32671	36231	11104	11843
GRAND TOTAL				92918				98265				91849

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	TOTAL	OBSERVED	TOTAL	OBSERVED	TOTAL	OBSERVED
CV-RENAL		1802.0		2979.0		2926.0
		1642.9		2863.5		2884.6
		1.097		1.040		1.014
NON CV-R		857.0		1323.0		1319.0
		760.7		1320.4		1266.7
		1.127		1.002		1.041
CANCER		276.0		479.0		501.0
		258.1		434.6		424.1
		1.070		1.102		1.181

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	1959	1960	1969	1970	1971	69-71 SUM
TOTAL	875	927	971	995	988	993	945	2926
CV-RENAL	455	490	527	559	560	548	499	1607
HEART	289	302	347	363	393	389	374	1156
NON CV-R	420	437	444	436	446	445	446	1319
CANCER	138	138	176	140	155	172	174	501

STATE	MICHIGAN	
	1950	1970
1950 RANK BY POPULATION	120	
1950 POP/50. MILE	5597	
1970 POP/50. MILE	5309	
1949 MED. FAM. INCOME	3541	
1969 MED. FAM. INCOME	9995	
URBAN CLASS	CENTRAL	
1950 URBAN AREA RANK	117	
JAN MEAN TEMPERATURE	22	
JULY MEAN TEMPERATURE	71	
MEAN ANN. PRECIPITATION	29	
LAND RESOURCE REGION	L	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	70 PPM	
NON-CARBONATE HARDNESS	23 PPM	
FLUORIDATION STATUS	UNCERTAIN	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	429	437	0	C	548	523	1	0	358	378	3	1
1-4	1752	1635	1	C	2055	1925	4	2	1338	1341	3	7
5-9	1684	1576	2	C	2419	2247	6	1	1928	1845	8	7
10-14	1407	1295	2	3	2247	2268	0	1	1962	2022	12	1
15-19	1131	1277	0	C	1632	1640	1	2	1706	1898	3	5
20-24	1542	1579	3	C	1213	1302	0	5	1296	1203	4	8
25-29	1733	1843	1	C	1432	1436	2	3	903	939	4	6
30-34	1425	1419	2	1	1552	1751	1	3	844	982	3	4
35-39	1341	1411	2	1	1650	1673	1	2	1166	1271	4	3
40-44	1406	993	0	3	1377	1425	2	0	1364	1491	3	5
45-49	961	885	0	0	1181	1057	1	0	1392	1389	3	6
50-54	876	751	0	0	890	901	1	0	1073	1223	4	4
55-59	699	662	0	1	723	748	1	0	889	881	1	4
60-64	464	473	0	1	639	653	1	0	551	742	3	3
65-69	253	308	0	0	420	511	0	0	417	581	0	3
70-74	215	256	0	1	234	299	1	0	309	480	1	0
75-79*	21	50	0	0	85	155	0	0	142	231	1	0
80-84*	27	50	0	0	28	65	0	0	63	131	2	0
85-UP												
TOTALS	18556	18266	12	12	21545	21926	24	24	19868	21041	71	81
GRAND TOTAL				36846				43519				41061

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 588.0 EXPECTED* 434.5 OBS/EXP 1.169	1084.0 960.0 1.129	1176.0 1132.5 1.036
CV-RENAL	OBSERVED 281.0 EXPECTED* 298.0 OBS/EXP 1.133	559.0 494.7 1.130	641.0 634.7 1.010
HEART	OBSERVED 218.0 EXPECTED* 182.0 OBS/EXP 1.198	405.0 361.6 1.120	504.0 455.2 1.107
NON CV-R	OBSERVED 307.0 EXPECTED* 246.5 OBS/EXP 1.245	525.0 465.3 1.128	535.0 497.8 1.075
CANCER	OBSERVED 96.0 EXPECTED* 82.4 OBS/EXP 1.165	180.0 160.6 1.121	187.0 187.0 1.000

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949	1950	1959	1960	1961	SUM	59-61	1969	1970	1971	SUM	69-71
TOTAL	286	302	376	365	343	1884	1884	401	354	411	1176	1176
CV-RENAL	133	146	186	182	181	929	929	215	192	234	641	641
HEART	193	194	195	182	179	953	953	172	165	187	504	504
NON CV-R	51	52	95	77	83	338	338	186	172	177	535	535
CANCER			74	57	49	180	180	61	65	61	187	187

STATE	MICHIGAN
1950 RANK BY POPULATION	325
1950 POP./SQ. MILE	7086
1970 POP./SQ. MILE	7896
1949 MED. FAM. INCOME	4092
1969 MED. FAM. INCOME	11283
URBAN CLASS	FRNGE
1950 URBAN AREA RANK	5
JAN MEAN TEMPERATURE	26
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	31
LAND RESOURCE REGION	1
WATER SOURCE	SURFACE
TOTAL HARDNESS	96 PPM
NON-CARBONATE HARDNESS	23 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1951

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	NM	NP
1	116	116	10	8
1-4	429	4040	32	29
5-9	4265	4054	29	28
10-14	3364	3268	36	26
15-19	2931	3387	17	18
20-24	3510	4217	25	32
25-29	3584	3713	21	19
30-34	3519	3822	25	17
35-39	3638	3904	18	11
40-44	3311	3653	25	16
45-49	3094	3426	18	13
50-54	3125	3278	14	9
55-59	3124	3021	18	13
60-64	3068	2664	15	10
65-69	2362	1962	7	9
70-74	1418	1334	4	2
75-79	1356	1416	8	7
80-84			0	0
85-UP	260	284	3	1
TOTALS	51346	52579	325	261
GRAND TOTAL				104511

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

	49-50	59-61
OBSERVED DEATHS BY CAUSE AND YEAR		

	1155	1192	2337	1239	1250	1263	3752
TOTAL							
CV-RENAL	645	671	1316	715	683	705	2103
HEART	478	935	935	507	498	497	1502
NON CV-R	510	511	1021	524	567	558	1649
CANCER	182	198	380	208	233	209	650

1960				1970			
WM	WF	NM	NP	WM	WF	NM	NP
1206	191	25	23	822	733	40	16
4306	430	75	90	2872	2861	101	91
3533	596	80	93	4576	4274	136	107
3114	4592	48	50	4878	4708	108	107
256	4212	31	41	4779	5227	71	87
3247	3235	43	59	3845	4623	81	86
757	2595	56	49	2745	2747	63	71
158	3084	34	40	2212	2305	55	55
332	3160	27	27	2247	2231	52	46
332	3456	21	25	2457	2691	47	42
190	3517	24	14	2627	2766	30	35
331	3138	30	14	2553	3040	25	26
16	2922	18	16	2626	3080	23	20
506	2724	16	7	2203	2657	23	19
2486	2486	4	4	1725	2453	13	17
273	2073	14	8	1423	2115	5	9
274	1233	3	4	1146	1595	5	8
576	684	5	0	738	1017	1	2
282	420	4	2	435	669	2	2
506	54153	558	567	47059	51792	881	846
			106884				100578

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

	OBSERVED DEATHS BY CAUSE AND YEAR					69-71 SUM
	1960	1961	59-61 SUM	1969	1970	
1	1250	1263	3752	1314	1299	3892
2	683	697	1503	551	538	1680
3	567	558	1649	583	565	1709
4	233	208	650	235	240	727
5	100	100	299	100	100	299
6	100	100	299	100	100	299
7	100	100	299	100	100	299
8	100	100	299	100	100	299
9	100	100	299	100	100	299
10	100	100	299	100	100	299
11	100	100	299	100	100	299
12	100	100	299	100	100	299
13	100	100	299	100	100	299
14	100	100	299	100	100	299
15	100	100	299	100	100	299
16	100	100	299	100	100	299
17	100	100	299	100	100	299
18	100	100	299	100	100	299
19	100	100	299	100	100	299
20	100	100	299	100	100	299
21	100	100	299	100	100	299
22	100	100	299	100	100	299
23	100	100	299	100	100	299
24	100	100	299	100	100	299
25	100	100	299	100	100	299
26	100	100	299	100	100	299
27	100	100	299	100	100	299
28	100	100	299	100	100	299
29	100	100	299	100	100	299
30	100	100	299	100	100	299
31	100	100	299	100	100	299
32	100	100	299	100	100	299
33	100	100	299	100	100	299
34	100	100	299	100	100	299
35	100	100	299	100	100	299
36	100	100	299	100	100	299
37	100	100	299	100	100	299
38	100	100	299	100	100	299
39	100	100	299	100	100	299
40	100	100	299	100	100	299
41	100	100	299	100	100	299
42	100	100	299	100	100	299
43	100	100	299	100	100	299
44	100	100	299	100	100	299
45	100	100	299	100	100	299
46	100	100	299	100	100	299
47	100	100	299	100	100	299
48	100	100	299	100	100	299
49	100	100	299	100	100	299
50	100	100	299	100	100	299
51	100	100	299	100	100	299
52	100	100	299	100	100	299
53	100	100	299	100	100	299
54	100	100	299	100	100	299
55	100	100	299	100	100	299
56	100	100	299	100	100	299
57	100	100	299	100	100	299
58	100	100	299	100	100	299
59	100	100	299	100	100	299
60	100	100	299	100	100	299
61	100	100	299	100	100	299
62	100	100	299	100	100	299
63	100	100	299	100	100	299
64	100	100	299	100	100	299
65	100	100	299	100	100	299
66	100	100	299	100	100	299
67	100	100	299	100	100	299
68	100	100	299	100	100	299
69	100	100	299	100	100	299
70	100	100	299	100	100	299
71	100	100	299	100	100	299
72	100	100	299	100	100	299
73	100	100	299	100	100	299
74	100	100	299	100	100	299
75	100	100	299	100	100	299
76	100	100	299	100	100	299
77	100	100	299	100	100	299
78	100	100	299	100	100	299
79	100	100	299	100	100	299
80	100	100	299	100	100	299
81	100	100	299	100	100	299
82	100	100	299	100	100	299
83	100	100	299	100	100	299
84	100	100	299	100	100	299
85	100	100	299	100	100	299
86	100	100	299	100	100	299
87	100	100	299	100	100	299
88	100	100	299	100	100	299
89	100	100	299	100	100	299
90	100	100	299	100	100	299
91	100	100	299	100	100	299
92	100	100	299	100	100	299
93	100	100	299	100	100	299
94	100	100	299	100	100	299
95	100	100	299	100	100	299
96	100	100	299	100	100	299
97	100	100	299	100	100	299
98	100	100	299	100	100	299
99	100	100	299	100	100	299
100	100	100	299	100	100	299

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	2337.0	3752.0	3892.0
OBSERVED	2173.3	3675.3	3841.6
EXPECTED*	1.075	1.021	1.013
OBS/EXP			
CV-RENAL			
OBSERVED	1316.0	2103.0	2183.0
EXPECTED*	1221.6	2119.3	2325.8
OBS/EXP	1.077	0.992	0.939
HEART			
OBSERVED	935.0	1502.0	1640.0
EXPECTED*	880.4	1511.4	1623.6
OBS/EXP	1.062	0.994	1.010
NON CV-R			
OBSERVED	1021.0	1649.0	1709.0
EXPECTED*	951.7	1556.1	1515.8
OBS/EXP	1.073	1.060	1.127
CANCER			
OBSERVED	380.0	650.0	727.0
EXPECTED*	356.2	589.4	589.0
OBS/EXP	1.067	1.103	1.243

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE
STATE	MINNESOTA
1950 BANK BY POPULATION	102
1950 POP/50. MILE	1678
1970 POP/50. MILE	1694
1949 MED. FAM. INCOME	3465
1969 MED. FAM. INCOME	913
URBAN CLASS	CENTRAL
1950 URBAN AREA BANK	85
JAN MEAN TEMPERATURE	10
JULY MEAN TEMPERATURE	65
MEAN AN. PRECIPITATION	26
LAND RESOURCE REGION	K
WATER SOURCE	SURFACE
TOTAL HARDNESS	44 PPM
NON-CARBOANATE HARDNESS	3 PPM
FLOUORIDATION STATUS	NO ARTIFICIAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WH	WF	NH	NF	WH	WF	NH	NF	WH	WF	NH	NF
LT 1	5339	5209	105	118	5056	4843	269	282	3366	3219	405	402
1-4	18854	18279	373	355	16931	16543	1024	935	11072	10851	1493	1489
5-9	17607	17036	316	288	16365	16055	940	829	10563	10193	1490	1578
10-14	13727	13350	242	209	12644	12269	639	598	8563	8193	1640	1578
15-19	14300	13577	242	209	12644	12269	639	598	8563	8193	1640	1578
20-24	21663	20515	372	325	17983	17266	472	589	12349	12037	1259	1506
25-29	22772	21725	512	406	18903	18462	641	690	16050	16009	1182	1242
30-34	17648	16588	431	302	13111	12275	654	637	9465	9188	975	923
35-39	16082	15076	357	299	12100	11552	613	566	7596	7843	704	787
40-44	15262	14381	321	232	12180	11552	491	416	8349	9291	681	681
45-49	15162	14381	250	216	12645	15040	421	350	9379	10969	641	610
50-54	15071	14381	253	203	12668	15081	304	269	9839	12129	472	472
55-59	15071	14381	217	196	12283	15081	252	248	9671	12441	379	410
60-64	13047	13545	206	131	11690	14524	187	204	9121	12527	309	292
65-69	9483	10548	125	122	10520	13416	200	164	7464	11755	201	280
70-74	5922	7330	77	87	8166	10562	133	119	6488	11083	158	193
75-79#	5597	7782	77	45	4785	5822	72	84	4987	8599	114	144
80-84#	0	0	0	0	2192	3728	31	47	2865	5478	71	78
85-UP	1031	1725	15	11	1279	2443	12	24	1670	3519	62	52
TOTALS	244061	269189	4503	3965	217823	249455	7812	7782	185168	221246	13677	14309
GRAND TOTAL				521748				462872				434400

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959-61				1970				69-71	
	1949	1950	1951	1952	1959	1960	1961	1962	1969	1970	1971	1972	SUM	SUM
TOTAL	5301	5451	10752	10752	5756	5897	5683	17326	5539	5500	5012	16051	16051	16051
CV-RENAL	4887	2894	3861	3861	3756	3756	3236	9900	3093	3018	2086	8199	8199	8199
HEART	2417	2027	3861	3861	2279	2542	2435	7193	2218	2018	2018	8199	8199	8199
POTENTIAL	2417	2027	3861	3861	2279	2542	2435	7193	2218	2018	2018	8199	8199	8199
CANCER	880	890	1770	1770	905	959	982	2846	899	991	986	2876	2876	2876

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

MINNESOTA

STATE

1950 RANK BY POPULATION

17

1950 POP/50. FILE

9697

1970 POP/50. FILE

7884

1949 MED. FAM. INCOME

3080

1969 MED. FAM. INCOME

3960

URBAN DEATHS

CENTRAL

1950 URBAN AREA RANK

13

JAN MEAN TEMPERATURE

14

JULY MEAN TEMPERATURE

74

MEAN ANN. PRECIPITATION

24

LAND RESOURCE REGION

K

WATER SOURCE

SURFACE

TOTAL HARDNESS

68 PPM

NON-CARBONATE HARDNESS

43 PPM

FLUORIDATION STATUS

FLUORIDATED IN 1957

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			NM			WM			NM			WM			NM		
	WF	WF	WF	NF	NF	NF	WF	WF	WF	NF	NF	NF	WF	WF	WF	NF	NF	NF
LT 1	359	322	0	0	0	1	576	506	1	1	1	13	569	479	11	11	13	13
1-4	1173	1173	0	0	0	8	1989	1903	8	7	7	20	2005	1939	35	35	20	20
5-9	974	1000	1	3	3	8	2017	1928	4	4	4	31	2897	2735	34	34	31	31
10-14	841	1000	2	1	3	7	1606	1582	7	3	3	12	2573	2481	12	12	7	7
15-19	765	1377	1	3	3	8	1090	1981	3	8	8	18	2051	2769	7	7	18	18
20-24	825	1809	2	8	8	3	963	2067	3	6	6	163	1541	3105	20	20	163	163
25-29	1131	1403	1	1	1	1338	1490	8	30	30	30	89	2027	2377	34	34	89	89
30-34	1108	1234	4	6	6	1403	1403	10	9	9	9	36	1948	1903	27	27	36	36
35-39	866	1167	2	4	4	1183	1281	3	4	4	4	16	1466	1397	23	23	16	16
40-44	895	1095	4	0	0	1087	1187	6	4	4	4	7	1291	1405	15	15	7	7
45-49	797	1072	3	3	3	965	1219	3	5	5	5	5	1178	1320	2	2	5	5
50-54	763	984	1	1	1	912	1083	1	2	2	2	1	1100	1250	6	6	1	1
55-59	704	890	2	2	2	767	1050	2	3	3	3	3	897	1246	2	2	3	3
60-64	634	735	2	4	4	673	983	2	2	2	2	3	822	1099	2	2	3	3
65-69	460	667	2	1	1	598	832	2	0	0	0	5	593	987	1	1	5	5
70-74	321	458	4	2	2	488	691	1	1	1	1	2	486	870	0	0	2	2
75-79	330	519	1	0	0	282	530	0	0	0	0	1	354	713	1	1	1	1
80-84	0	0	0	0	0	154	314	0	0	0	0	1	237	485	0	0	1	1
85-UP	63	124	2	0	0	110	220	0	0	0	0	2	140	371	0	0	2	2
TOTALS	13009	16802	34	40	40	18201	22250	68	184	184	184	428	24175	28931	232	232	428	428
GRAND TOTAL				2985					40663			53766						53766

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	626.0	1115.0	0.558	626.0	1242.4	0.504	626.0	1207.0	0.519
CV-RENAL	293.0	518.0	0.566	293.0	709.3	0.413	293.0	555.0	0.528
HEART	176.0	357.0	0.493	176.0	497.4	0.354	176.0	401.0	0.439
NON CV-R	327.0	597.0	0.548	327.0	653.1	0.501	327.0	652.0	0.502
CANCER	135.0	188.0	0.718	135.0	234.8	0.575	135.0	241.0	0.560

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	MINNESOTA		MINNESOTA	
	STATE	1950 BANK BY POPULATION	401	69-71
STATE	1950 POP/SQ. MILE	1950 POP/SQ. MILE	5639	SUM
1950 POP/SQ. MILE	1970 POP/SQ. MILE	1970 POP/SQ. MILE	4012	1207
1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME	3709	555
URBAN CLASS	URBAN CLASS	URBAN CLASS	11563	401
1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK	INDEPENDENT	652
JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	14	241
JULY MEAN TEMPERATURE	JULY MEAN TEMPERATURE	JULY MEAN TEMPERATURE	71	
MEAN ANN. PRECIPITATION	MEAN ANN. PRECIPITATION	MEAN ANN. PRECIPITATION	28	
LAND RESOURCE REGION	LAND RESOURCE REGION	LAND RESOURCE REGION	M	
WATER SOURCE	WATER SOURCE	WATER SOURCE	GROUND	
TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS	260 PPM	
NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	20 PPM	
FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATED IN 1960	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1T-1	374	380	0	0	473	458	4	3	344	278	2	2
1-4	1358	1311	3	2	1682	1574	2	5	1151	1167	8	5
5-9	1174	1093	4	4	1766	1767	6	2	1781	1771	14	5
10-14	984	971	4	1	1522	1512	5	3	1865	1893	10	12
15-19	1213	1542	9	4	1415	1656	37	7	2352	3436	198	11
20-24	1758	1490	51	2	1736	1596	89	7	2861	3058	198	9
25-29	1323	1099	29	0	1180	900	32	3	1806	1835	100	6
30-34	1005	911	13	0	1006	923	7	3	1806	1835	8	5
35-39	814	839	2	1	1049	873	9	4	856	785	11	4
40-44	645	765	2	1	842	785	6	1	821	811	6	5
45-49	708	749	4	3	820	785	1	1	908	846	6	1
50-54	707	718	2	1	620	680	1	0	841	784	3	3
55-59	586	503	0	0	663	681	0	1	702	774	2	1
60-64	480	407	2	0	788	691	3	0	563	637	4	1
65-69	333	407	1	0	703	579	2	0	476	650	3	0
70-74	266	294	1	0	446	442	5	0	534	636	3	1
75-79	206	331	0	0	220	315	0	0	379	443	2	0
80-84	0	0	0	0	127	159	1	0	207	276	1	0
85-UP	60	89	0	0	65	87	0	0	93	196	1	0
TOTALS	14029	14237	127	17	17267	16299	210	39	18953	20341	322	75
GRAND TOTAL			28410				33815				39691	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949		1950		49-50		1959		1960		1961		59-61		1970		1971		69-71		STATE		MINNESOTA
	TOTAL	NON-CAN	TOTAL	NON-CAN	SUM	PER	TOTAL	PER	TOTAL	PER	SUM	PER	SUM	PER	SUM	PER	SUM	PER	SUM	PER	1950 RANK BY POPULATION		
TOTAL	267	235	502	257	260	241	758	302	266	273	841										1950 POP/SQ. MILE		
CI-FEMAL	12	110	222	120	140	120	135	172	135	138	3675										1970 POP/SQ. MILE		
HEART	7	110	156	94	108	97	299	119	103	100	445										1949 MED. FAM. INCOME		
NON-CAN	155	125	286	137	120	121	378	130	131	135	396										1969 MED. FAM. INCOME		
CANCER	44	34	78	57	40	39	136	50	43	48	141										URBAN CLASS		
																					1950 URBAN AREA RANK		
																					JAN MEAN TEMPERATURE		
																					JULY MEAN TEMPERATURE		
																					MEAN ANNU. PRECIPITATION		
																					LAND RESOURCE REGION		
																					WATER SOURCE		
																					TOTAL HARDNESS		
																					NON-CARBONATE HARDNESS		
																					51 PPM		
																					FLUORIDATION STATUS		
																					FLUORIDATED		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960			1970		
	WM	WF	NM	WM	WF	NM	WM	WF	NM
LT 1	3504	3227	91	3832	3595	127	2608	2541	191
1-4	12763	12477	289	13227	12578	605	9843	9546	703
5-9	11966	11468	219	14480	14050	628	13229	12699	882
10-14	9384	9169	172	12752	12711	436	13374	13098	859
15-19	9298	10605	166	10673	12329	278	13414	14461	743
20-24	11825	13552	237	9767	11659	225	13079	16221	525
25-29	12109	12803	294	8862	8183	310	10302	9951	514
30-34	10534	11594	266	8001	8511	307	6843	6753	428
35-39	9953	11334	212	8172	9255	302	5920	6204	294
40-44	9426	10551	217	8201	9578	270	6618	7344	340
45-49	8844	10402	174	8457	9684	242	7130	8192	329
50-54	8860	10064	162	8027	9188	213	7194	8730	270
55-59	8262	9284	160	7289	9068	163	7216	8706	246
60-64	7173	7787	134	6799	8594	166	6287	8113	197
65-69	5088	5802	119	6111	7830	123	4964	7614	179
70-74	3202	3380	83	4561	6100	95	4010	6810	135
75-79*	2887	4360	59	2704	3903	69	3016	5333	66
80-84*	0	0	0	1223	2080	31	1714	3381	66
85-UP	583	991	16	638	1412	20	1035	2157	55
TOTALS	145680	159450	3120	143786	160308	4610	137887	157854	7022
GRAND TOTAL			311349						309880

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	6388.0	6388.0	1.0	10171.0	10171.0	1.0	10066.0	10066.0	1.0
CV-RENAL	3360.0	3360.0	1.0	5476.0	5476.0	1.0	5595.0	5595.0	1.0
HEART	2354.0	2354.0	1.0	3795.0	3795.0	1.0	3980.0	3980.0	1.0
NON CV-R	3028.0	3028.0	1.0	4695.0	4695.0	1.0	4471.0	4471.0	1.0
CANCER	1095.0	1095.0	1.0	1846.0	1846.0	1.0	1825.0	1825.0	1.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949			1959			1969			1971		
	WM	WF	NM	WM	WF	NM	WM	WF	NM	WM	WF	NM
TOTAL	3268	3120	6388	3306	3371	10171	3381	3361	3324	10066		
CV-RENAL	1719	1641	3360	1784	1799	5476	1908	1825	1862	5595		
HEART	1212	1142	2354	1256	1262	3795	1358	1309	1313	3980		
NON CV-R	1549	1479	3028	1522	1572	4695	1473	1536	1462	4471		
CANCER	570	525	1095	612	615	1846	586	619	620	1825		

CITY CHARACTERISTICS

CODE

STATE	1950 RANK BY POPULATION	1950 POP/50. MILE	1970 POP/50. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
MINNESOTA	35	5965	5938	3780	10544	CENTRAL	13	14	74	24	K	SURFACE	58 PPM	10 PPM	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	381	336	50	65	541	506	86	98
1-4	1353	1359	214	192	1726	1609	395	398
5-9	1080	1003	178	162	1374	1315	328	328
10-14	714	690	125	127	1071	1105	247	247
15-19	469	474	42	42	589	587	300	187
20-24	463	477	495	198	3860	1501	314	256
25-29	2524	1420	235	207	1900	1173	249	237
30-34	1678	1012	174	181	1339	1056	175	207
35-39	1888	790	133	165	1203	1019	166	178
40-44	653	709	114	142	941	829	127	155
45-49	505	557	101	118	675	644	117	123
50-54	659	466	81	89	535	600	101	125
55-59	663	359	61	63	532	513	86	102
60-64	505	286	45	42	405	401	57	96
65-69	260	238	39	54	505	308	49	51
70-74	169	174	29	26	300	232	31	37
75-79*	157	194	16	44	143	148	20	27
80-84*	0	0	0	0	61	75	10	9
85-UP	20	25	6	5	35	47	6	10
TOTALS	20825	11985	2523	2092	23769	14579	2837	2868
GRAND TOTAL				37425				44053

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP
TOTAL	425.0	425.0	869.0	1042.0	1042.0	1042.0
CV-RENAL	183.0	183.0	349.0	490.0	490.0	490.0
HEART	126.0	126.0	238.0	379.0	379.0	379.0
NON CV-R	242.0	242.0	520.0	552.0	552.0	552.0
CANCER	52.0	52.0	114.0	178.0	178.0	178.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	49-50 SUM	59-61 SUM	1970	1971	69-71 SUM	MISSISSIPPI CODE
TOTAL	189	236	425	869	341	317	1042	STATE 320
CV-RENAL	80	103	183	349	170	163	490	1950 POP/50. MILE 6453
HEART	55	71	126	238	163	131	490	1970 POP/50. MILE 4368
NON CV-R	109	133	242	520	125	124	379	1949 MED. FAM. INCOME 2321
CANCER	24	28	52	114	184	154	552	1969 MED. FAM. INCOME 6757
					66	52	178	URBAN CLASS INDEPENDENT
								1950 URBAN AREA RANK 52
								JAN MEAN TEMPERATURE 81
								JULY MEAN TEMPERATURE 81
								MEAN ANNUAL PRECIPITATION 61
								LAND REVENUE REGION 7
								TOTAL HARDNESS 3000
								NON-CARBONATE HARDNESS 20 PPM
								FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	149	142	284	262	341	332	330	361	185	162	284	291
1-4	554	565	904	841	1267	1131	1186	1231	724	645	978	987
5-9	560	477	822	895	1238	1224	1356	1444	957	971	1342	1258
10-14	484	417	723	708	1035	963	1106	1049	1082	932	1368	1405
15-19	358	471	583	702	630	722	745	812	814	801	1192	1161
20-24	456	581	562	604	684	901	475	644	578	783	587	780
25-29	544	585	650	799	935	913	403	541	704	685	429	598
30-34	513	532	545	704	807	829	446	631	581	595	367	531
35-39	453	499	602	838	717	776	387	584	556	606	328	434
40-44	456	446	587	721	684	597	397	609	547	592	373	547
45-49	354	308	598	609	526	549	493	668	522	583	334	504
50-54	256	269	422	447	442	503	497	574	501	536	340	519
55-59	202	235	304	342	333	342	407	477	361	386	423	516
60-64	174	215	274	274	224	265	310	406	337	449	492	496
65-69	139	167	256	336	179	217	230	331	254	315	337	472
70-74	97	107	143	183	127	149	200	284	140	243	189	339
75-79*	79	116	125	160	87	109	160	206	82	168	163	211
80-84*	0	0	0	0	40	87	63	97	52	129	78	131
85-89	6	21	23	31	17	50	51	70	42	76	68	99
TOTALS	5824	6153	8301	9658	10313	10769	9323	11097	9075	9760	9564	11249
GRAND TOTAL				29936				41502				39648

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL
CV-RENAL	316.0	532.0	589.1	CV-RENAL	713.0	1298.0	1443.0	CV-RENAL	547.7	1162.6	1261.8	CV-RENAL
HEART	182.0	347.0	455.0	HEART	170.5	375.3	441.8	HEART	1.302	1.116	1.144	HEART
NON CV-R	397.0	766.0	591.8	NON CV-R	1.067	0.925	1.030	NON CV-R				NON CV-R
CANCER	62.0	156.0	202.0	CANCER	73.3	154.1	172.3	CANCER				CANCER
	0.846	1.012	1.172									

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	MISSISSIPPI		
1950 RANK BY POPULATION	400		
1950 POP/SQ. MILE	4828		
1970 POP/SQ. MILE	4956		
1949 MED. FAM. INCOME	1734		
1969 MED. FAM. INCOME	6308		
URBAN CLASS	INDEPENDENT		
1950 URBAN AREA RANK	-		
JAN MEAN TEMPERATURE	45		
JULY MEAN TEMPERATURE	51		
MEAN ANN. PRECIPITATION	52		
LAND RESOURCE REGION	GROUND		
WATER SOURCE	6 PPM		
TOTAL SOLGESS	0 PPM		
NON-URBAN HARDNESS	NO ARTIFICIAL OPTIMUM NATURAL		
FLUORIDATION STATUS			

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	190	192	108	139	249	270	158	164	268	224	140	119
1-4	879	832	528	554	913	896	616	662	725	665	456	514
5-9	821	804	535	540	1072	1019	726	729	933	949	640	717
10-14	598	544	407	424	969	949	611	653	1009	957	695	714
15-19	637	914	324	417	1083	1308	467	489	1507	1805	633	667
20-24	1053	1247	74	433	1758	1232	295	322	2486	2346	359	479
25-29	676	549	362	492	775	684	232	304	897	804	225	340
30-34	770	822	313	406	700	820	251	347	613	608	205	295
35-39	725	768	331	483	704	771	284	412	576	599	177	250
40-44	648	669	302	391	693	764	263	328	616	776	206	311
45-49	468	616	250	346	675	728	246	382	645	760	220	290
50-54	443	469	240	253	547	594	219	321	633	736	222	285
55-59	316	403	175	152	443	587	218	265	569	721	205	287
60-64	272	366	110	125	334	480	173	214	493	602	188	273
65-69	221	298	117	140	283	428	197	202	391	557	181	248
70-74	156	179	60	62	217	350	110	127	215	448	101	171
75-79	122	185	61	77	127	247	58	70	167	303	80	98
80-84	0	0	0	0	79	117	27	19	103	228	48	57
85-UP	14	25	8	8	39	62	23	29	54	145	17	31
TOTALS	9209	10288	4535	5442	11440	12306	5204	6039	12900	14233	4998	6146
GRAND TOTAL				29474				34989				38277

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	555.0	1042.0	1166.0		555.0	951.0	1163.2		555.0	1042.0	1166.0	
CV-RENAL	267.0	514.0	590.0		267.0	491.0	642.5		267.0	514.0	590.0	
HEART	168.0	354.0	383.0		168.0	335.8	436.4		168.0	354.0	383.0	
NON CV-R	288.0	528.0	576.0		288.0	459.3	520.7		288.0	528.0	576.0	
CANCER	60.0	137.0	163.0		60.0	139.8	169.1		60.0	137.0	163.0	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	USDA CROSSLAND AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANNUAL PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
MISSISSIPPI	409.9	2704	2187	2035	6835	50	82	58	P	GROUND	29 PPM	0 PPM	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	608	614	608	585	1126	1030	853	926	758	694	796	736
1-4	2415	2377	1963	2696	4383	4245	3121	3193	2617	2568	2851	2794
5-9	2125	2086	1772	1875	4949	4873	3328	3341	3922	3804	3915	3899
10-14	1631	1688	1520	1638	4043	3996	2560	2740	4450	4258	3635	3914
15-19	1500	1555	1428	1847	2573	3461	2025	2325	4007	4216	3320	3816
20-24	2381	3624	1785	2073	2820	3890	1814	2363	3559	4694	2346	3356
25-29	2820	3238	1755	2038	3225	3769	1458	1892	3189	3370	1644	2091
30-34	2549	2667	1421	1741	3766	4098	1359	1865	2618	2849	1327	1839
35-39	2467	2644	1563	1853	3650	3868	1234	1629	2515	2863	1180	1636
40-44	2214	2410	1310	1401	3021	3157	1175	1482	2323	2502	1076	1433
45-49	1827	1908	1049	1188	2667	2897	1238	1779	2258	2301	1026	1316
50-54	1402	1495	763	771	2316	2611	1068	1349	2217	2656	969	1164
55-59	1034	1153	548	541	1736	2063	551	706	1787	2472	890	1085
60-64	889	962	370	377	1282	1506	508	643	1273	1931	726	1001
65-69	384	452	236	249	802	1234	339	380	823	1365	429	568
70-74	352	534	190	268	371	677	235	291	500	978	322	323
75-79	293	636	0	0	201	420	89	137	247	611	144	194
80-84	0	0	0	0	108	250	75	117	176	468	131	198
85-UP	46	90	34	71	43725	49068	23894	27735	43079	49572	28316	33001
TOTALS	27037	31043	18702	21489	43725	49068	23894	27735	43079	49572	28316	33001
GRAND TOTAL				98271				144422				153968

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL				TOTAL				TOTAL			
	OBSERVED	1633.0	3139.0	4200.0	OBSERVED	1633.0	3139.0	4200.0	OBSERVED	1633.0	3139.0	4200.0
	EXPECTED*	1480.7	3473.1	4354.9	EXPECTED*	1480.7	3473.1	4354.9	EXPECTED*	1480.7	3473.1	4354.9
	OBS/EXP	1.103	0.904	0.964	OBS/EXP	1.103	0.904	0.964	OBS/EXP	1.103	0.904	0.964
CV-RENAL	OBSERVED	706.0	1300.0	1679.0	OBSERVED	706.0	1300.0	1679.0	OBSERVED	706.0	1300.0	1679.0
	EXPECTED*	691.4	1683.5	2308.5	EXPECTED*	691.4	1683.5	2308.5	EXPECTED*	691.4	1683.5	2308.5
	OBS/EXP	1.021	0.796	0.727	OBS/EXP	1.021	0.796	0.727	OBS/EXP	1.021	0.796	0.727
HEART	OBSERVED	475.0	871.0	1156.0	OBSERVED	475.0	871.0	1156.0	OBSERVED	475.0	871.0	1156.0
	EXPECTED*	470.8	1148.9	1567.5	EXPECTED*	470.8	1148.9	1567.5	EXPECTED*	470.8	1148.9	1567.5
	OBS/EXP	1.009	0.758	0.737	OBS/EXP	1.009	0.758	0.737	OBS/EXP	1.009	0.758	0.737
NON CV-R	OBSERVED	927.0	1799.0	2521.0	OBSERVED	927.0	1799.0	2521.0	OBSERVED	927.0	1799.0	2521.0
	EXPECTED*	789.3	1789.5	2046.4	EXPECTED*	789.3	1789.5	2046.4	EXPECTED*	789.3	1789.5	2046.4
	OBS/EXP	1.174	1.005	1.232	OBS/EXP	1.174	1.005	1.232	OBS/EXP	1.174	1.005	1.232
CANCER	OBSERVED	176.0	435.0	618.0	OBSERVED	176.0	435.0	618.0	OBSERVED	176.0	435.0	618.0
	EXPECTED*	208.4	492.5	632.9	EXPECTED*	208.4	492.5	632.9	EXPECTED*	208.4	492.5	632.9
	OBS/EXP	0.845	0.883	0.976	OBS/EXP	0.845	0.883	0.976	OBS/EXP	0.845	0.883	0.976

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	MISSISSIPPI	
	STATE	1950 RANK BY POPULATION
STATE	1040	1040
1950 POP./SQ. MILE	3067	1950 POP./SQ. MILE
1949 MED. FAM. INCOME	2608	1949 MED. FAM. INCOME
1949 MED. FAM. INCOME	6298	1949 MED. FAM. INCOME
URBAN CLASS	CENTRAL	URBAN CLASS
1950 URBAN AREA RANK	119	1950 URBAN AREA RANK
JAN MEAN TEMPERATURE	48	JAN MEAN TEMPERATURE
JULY MEAN TEMPERATURE	82	JULY MEAN TEMPERATURE
MEAN ANN. PRECIPITATION	50	MEAN ANN. PRECIPITATION
LAND RESOURCE REGION	P	LAND RESOURCE REGION
WATER SOURCE	SURFACE	WATER SOURCE
TOTAL HARDNESS	47 PPM	TOTAL HARDNESS
NON-CARBONATE HARDNESS	16 PPM	NON-CARBONATE HARDNESS
FLUORIDATION STATUS	FLUORIDATED IN 1969	FLUORIDATION STATUS

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	168	155	158	121	207	181	168	171	133	119	99	111
1-4	692	719	475	466	841	792	640	583	402	387	372	352
5-9	647	689	476	501	900	856	699	700	586	578	578	523
10-14	601	676	411	408	874	874	527	562	783	752	579	578
15-19	439	661	322	419	548	699	389	419	639	535	535	522
20-24	601	842	353	483	476	621	402	334	499	558	255	321
25-29	685	725	327	428	559	632	222	222	459	464	154	226
30-34	591	648	269	365	656	718	230	299	398	429	142	217
35-39	597	645	297	411	664	673	186	323	367	458	146	236
40-44	536	603	293	380	529	633	205	292	457	541	190	244
45-49	483	495	262	318	561	514	221	301	474	554	164	263
50-54	363	431	215	256	478	514	220	264	369	483	167	252
55-59	276	324	185	137	392	463	196	225	426	455	180	199
60-64	226	242	108	114	273	355	156	194	334	458	178	236
65-69	176	239	129	115	232	283	144	181	275	414	160	208
70-74	124	139	57	60	178	238	87	81	181	329	119	146
75-79#	90	134	50	51	113	171	50	47	126	221	80	87
80-84#	0	0	0	0	49	90	21	31	84	136	31	35
85-UP	17	16	13	10	22	47	16	24	51	126	25	34
TOTALS	7312	8283	4400	5043	8552	9362	4617	5358	7084	8117	4154	4790
GRAND TOTAL				25038				27889				24145

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	480.0	385.7	1.244		825.0	759.4	1.086		930.0	891.4	1.043	
CV-RENAL	218.0	182.6	1.194		396.0	384.6	1.030		425.0	507.7	0.837	
HEART	127.0	125.2	1.014		237.0	263.2	0.900		283.0	342.6	0.826	
NON CV-R	262.0	203.2	1.289		429.0	374.8	1.145		505.0	383.7	1.316	
CANCER	45.0	56.4	0.796		105.0	110.9	0.946		134.0	129.2	1.037	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1959				1961				1971			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	238	242	480	282	282	274	630	825	290	325	315	930	315	315	930	930
CV-RENAL	105	113	218	142	142	137	117	396	137	146	142	425	142	146	142	425
HEART	61	66	127	84	84	87	66	237	88	95	100	283	95	100	283	283
NON CV-R	133	129	262	140	140	137	152	429	153	179	173	505	173	179	505	505
CANCER	23	22	45	38	38	30	37	105	38	46	50	134	50	46	134	134

CITY CHARACTERISTICS

STATE	MISSISSIPPI	
	1950 BANK BY POPULATION	482
1950 POP/50. MILE	3430	
1970 POP/50. MILE	1775	
1949 MED. FAM. INCOME	1908	
1969 MED. FAM. INCOME	7097	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA BANK	-	
JAN MEAN TEMPERATURE	50	
JULY MEAN TEMPERATURE	81	
MEAN ANN. PRECIPITATION	56	
LAND RESOURCE REGION	P	
WATER SOURCE	GROUND	
TOTAL HARDNESS	0 PPM	
NON-CARBONATE HARDNESS	0 PPM	
FLUORIDATION STATUS	FLUORIDATED IN 1965	

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	297	277	204	207	319	330	252	280
1-4	1155	1075	701	752	1279	1203	964	931
5-9	1028	1055	605	595	1555	1558	1107	1154
10-14	859	932	528	612	1461	1422	837	935
15-19	707	976	517	657	1009	1088	542	604
20-24	933	1358	494	823	817	1046	435	593
25-29	1143	1313	509	713	902	1021	354	537
30-34	1100	1209	460	630	1116	1215	331	542
35-39	1016	1160	449	641	1108	1249	375	541
40-44	936	1068	442	626	1103	1211	393	558
45-49	818	884	408	504	1013	1124	392	509
50-54	626	791	329	378	868	985	364	488
55-59	541	691	206	251	756	956	357	448
60-64	493	609	155	189	573	819	243	312
65-69	399	538	189	264	450	727	221	362
70-74	278	421	91	136	400	626	155	225
75-79	241	333	102	128	259	429	108	119
80-84	0	0	0	0	146	246	48	77
85-89	29	70	19	20	74	133	29	56
TOTALS	12599	14740	6408	8186	15208	17388	7507	9271
GRAND TOTAL				4186				49374

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

CAUSE	1949			1950			49-50			OBSERVED DEATHS BY CAUSE AND YEAR			
	U.S.	U.S.	U.S.	U.S.	U.S.	U.S.	SUM	1959	1960	1961	59-61		
TOTAL	451	460	911	505	557	586							
HEART DISEASE	209	220	429	240	261	275							
CANCER	144	138	282	162	168	161							
NON CV-R	242	236	478	261	306	271							
CANCER	52	52	104	66	69	63							

CITY CHARACTERISTICS	CODE
STATE	MISSISSIPPI
1950 BANK BY POPULATION	283
1950 POP/SQ. MILE	1189
1970 POP/SQ. MILE	1775
1949 MED. FAM. INCOME	2131
1969 MED. FAM. INCOME	6831
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	47
JULY MEAN TEMPERATURE	80
MEAN ANN. PRECIPITATION	55
LAND RESOURCE REGION	F
WATER SOURCE	GROUND AND S
TOTAL HARDNESS	18 PPM
NON-CARBONATE HARDNESS	8 PPM
FLUORIDATION STATUS	FLUORIDATED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
I.T. 1	126	124	148	151	176	166	196	202
1-4	663	614	620	661	695	662	690	742
5-9	616	570	562	567	750	731	853	850
10-14	449	416	506	532	740	657	634	737
15-19	324	477	420	539	492	577	454	456
20-24	429	633	390	546	355	511	290	376
25-29	586	718	395	563	422	500	246	331
30-34	564	633	390	566	494	501	253	339
35-39	580	594	470	585	477	568	283	389
40-44	587	589	465	538	501	575	325	446
45-49	455	476	404	528	478	531	325	469
50-54	345	387	364	436	502	543	370	390
55-59	322	350	303	357	370	431	295	406
60-64	234	285	213	248	270	331	276	348
65-69	186	269	222	332	246	335	300	392
70-74	126	197	129	166	139	266	172	251
75-79*	106	181	136	169	94	179	95	155
80-84*	0	0	0	0	50	102	55	84
85-UP	14	40	30	34	28	71	33	61
TOTALS	6712	7553	6167	7516	7279	8237	6143	7484
GRAND TOTAL				27948				29143

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	TOTAL	OBSERVED	760.0	TOTAL	OBSERVED	760.0	TOTAL	OBSERVED	760.0
		EXPECTED*	561.9		EXPECTED*	1017.7		EXPECTED*	1033.6
		OBS/EXP	1.353		OBS/EXP	1.094		OBS/EXP	1.105
CV-RENAL		OBSERVED	383.0		OBSERVED	570.0		OBSERVED	527.0
		EXPECTED*	291.9		EXPECTED*	546.2		EXPECTED*	592.6
		OBS/EXP	1.312		OBS/EXP	1.044		OBS/EXP	0.889
HEART		OBSERVED	234.0		OBSERVED	344.0		OBSERVED	315.0
		EXPECTED*	194.5		EXPECTED*	363.8		EXPECTED*	392.7
		OBS/EXP	1.203		OBS/EXP	0.946		OBS/EXP	0.602
NON CV-R		OBSERVED	377.0		OBSERVED	543.0		OBSERVED	615.0
		EXPECTED*	270.0		EXPECTED*	471.5		EXPECTED*	441.0
		OBS/EXP	1.396		OBS/EXP	1.152		OBS/EXP	1.395
CANCER		OBSERVED	71.0		OBSERVED	139.0		OBSERVED	189.0
		EXPECTED*	81.1		EXPECTED*	144.6		EXPECTED*	146.8
		OBS/EXP	0.876		OBS/EXP	0.961		OBS/EXP	1.287

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	
TOTAL	393	367	760	1113	368	381	393	1142	MISSISSIPPI
CV-RENAL	198	185	383	570	168	172	165	503	STATE
HEART	116	118	234	344	113	84	113	310	1940 RANK BY POPULATION 439
NON CV-R	195	182	377	543	178	209	228	615	1950 POP/50. MILE 2881
CANCER	37	34	71	139	53	71	65	169	1970 POP/50. MILE 2426
									1949 MED. FAM. INCOME 2127
									1969 MED. FAM. INCOME 6715
									URBAN CLASS - INDEPENDENT
									1950 URBAN AREA RANK -
									JAN MEAN TEMPERATURE 49
									JULY MEAN TEMPERATURE 81
									MEAN ANN. PRECIPITATION 49
									LAND RESOURCE REGION 0
									WATER SOURCE SURFACE
									TOTAL HARDNESS 202 PPM
									NON-CARBONATE HARDNESS 80 PPM
									FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

AGE GROUP	1950				1960				1970				CAUSE	OBSERVED EXPECTED* OBS/EXP	1949-50	1959-61	1969-71
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF					
LT 1	265	264	29	27	372	393	35	25	461	440	49	49					
1-4	950	888	105	106	1295	1225	161	159	1484	1400	190	222			431.0	769.0	948.0
5-9	636	639	95	119	1147	1088	149	134	1838	1903	273	297			470.7	919.7	1231.0
10-14	482	456	98	75	925	935	113	132	1169	1685	204	199			0.916	0.836	0.770
15-19	1532	3178	93	178	2190	3350	113	132	3950	5635	204	249					
20-24	4192	2489	91	108	3372	2345	134	100	6120	6110	235	209			229.0	406.0	415.0
25-29	2078	1291	85	93	3072	2045	134	100	6120	6110	235	209			OBSERVED	229.0	415.0
30-34	932	780	93	103	1071	1077	120	78	2462	2177	217	242			EXPECTED*	248.6	664.9
35-39	676	714	79	101	802	842	95	78	1434	1352	179	166			OBS/EXP	0.807	0.624
40-44	583	612	71	94	724	736	86	71	1071	1092	131	123					
45-49	510	585	68	49	649	624	66	96	1037	1019	80	103					
50-54	505	490	87	70	570	563	80	80	975	1026	75	72			122.0	263.0	272.0
55-59	409	435	54	55	482	523	59	66	831	933	90	97			172.7	347.0	458.0
60-64	362	460	54	53	382	543	53	65	702	858	68	97			OBSERVED*	0.706	0.594
65-69	266	377	39	56	321	512	43	65	578	710	45	61			OBS/EXP		
70-74	211	321	37	29	276	444	48	52	385	615	49	64					
75-79*	212	360	28	33	182	322	30	33	312	563	37	54			NON CV-R	202.0	363.0
80-84*	0	0	0	0	112	199	13	16	236	440	21	34			OBSERVED	202.0	363.0
85-89	34	71	10	5	70	136	16	9	133	321	15	20			EXPECTED*	222.1	416.7
									77	219	15	15			OBS/EXP	0.910	0.871
TOTALS	14795	14650	1228	1311	16490	17268	1434	1458	25645	28512	2194	2453					
GRAND TOTAL				31974				36650				58804					
* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED																	
															OBSERVED	48.0	145.0
															EXPECTED*	70.3	175.5
															OBS/EXP	0.683	0.997

* * SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS					CODE		
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971		69-71 SUM	
CAUSE												STATE	MISSOURI
TOTAL	218	213	431	246	237	286	759	317	346	285	948	1950 RANK BY POPULATION	377
CV-RENAL	110	119	229	127	121	158	406	150	150	113	412	1950 POP./SQ. MILE	4634
HEART	53	69	122	80	85	98	283	98	103	71	275	1970 POP./SQ. MILE	1010
NON CV-R	108	94	202	119	116	128	363	167	194	172	533	1949 MED. FAM. INCOME	2757
CANCER	25	23	48	45	42	58	145	54	56	65	175	1969 MED. FAM. INCOME	10193
												URBAN CLASS	INDEPENDENT
												1950 URBAN AREA RANK	-
												JAN MEAN TEMPERATURE	29
												JULY MEAN TEMPERATURE	77
												MEAN ANN. PRECIPITATION	39
												LAND RESOURCE REGION	M
												WATER SOURCE	GROUND
												TOTAL HARDNESS	270 PPM
												NON-CARBONATE HARDNESS	0 PPM
												FLUORIDATION STATUS	NO ARTIFICIAL OPTIMUM NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	396	365	5	5	736	717	9	8
1-4	1633	1594	28	17	3085	2790	31	34
5-9	1510	1521	38	40	3309	3060	33	43
10-14	1163	1128	29	16	2714	2684	26	28
15-19	1025	1115	20	24	1758	2183	27	39
20-24	1103	1479	25	34	1606	2113	9	16
25-29	1586	1659	24	25	2037	2182	11	24
30-34	1404	1459	29	28	2254	2328	23	28
35-39	1309	1301	26	24	2365	2424	13	30
40-44	1097	1210	26	26	2039	2405	21	20
45-49	970	980	19	27	1818	1852	17	17
50-54	756	825	24	29	1638	1714	23	23
55-59	606	718	16	20	1330	1484	25	30
60-64	521	525	22	24	1039	1161	20	24
65-69	354	522	14	14	772	974	21	16
70-74	354	522	14	14	582	868	19	21
75-79	30	0	0	0	355	598	7	17
80-84	0	0	0	0	171	357	11	11
85-UP	61	125	5	3	133	257	6	9
TOTALS	17337	18847	377	402	29725	31831	338	434
GRAND TOTAL				36963				62328

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	692.0	1710.0	1.023		692.0	1710.0	1.023		692.0	1710.0	1.023	
CV-RENAL	359.0	962.0	1.196.0		359.0	962.0	1.196.0		359.0	962.0	1.196.0	
HEART	253.0	744.0	0.940		253.0	744.0	0.940		253.0	744.0	0.940	
NON CV-R	33.0	708.0	1.066		33.0	708.0	1.066		33.0	708.0	1.066	
CANCER	102.0	283.0	0.946		102.0	283.0	0.946		102.0	283.0	0.946	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				49-50				1959				1960				1961				59-61			
	SUM				SUM				SUM				SUM				SUM				SUM				SUM			
TOTAL	305	387	692	518	555	637	1710																					
CV - FEMAL	162	197	359	298	309	355	962																					
HEART	114	139	253	236	271	271	942																					
NON CV - R	143	190	333	220	246	282	748																					
CANCER	44	58	102	82	79	122	283																					

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NP
1T-1	192	190	11	13
1-4	761	713	41	41
5-9	748	720	50	44
10-14	595	582	32	26
15-19	701	754	149	188
20-24	1046	929	314	183
25-29	1209	884	340	60
30-34	1024	808	190	44
35-39	939	855	178	66
40-44	908	791	132	66
45-49	790	774	131	36
50-54	683	651	89	36
55-59	580	593	69	46
60-64	482	490	47	16
65-69	371	372	28	19
70-74	226	287	17	12
75-79	231	297	14	11
80-84	0	0	0	0
85-UP	38	54	4	3
TOTALS	11524	10744	1916	915
GRAND TOTAL				25099

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM
TOTAL	189	204	393	191	283	270	744
CV-RENAL	110	121	231	109	159	148	416
HEART	71	84	155	82	103	115	300
NON CV-R	79	83	162	82	124	122	328
CANCER	25	26	51	36	52	50	138

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 RANK BY POPULATION	MISSOURI
1950 POP/AC.	48	48	48
1950 POP/AC.	2642	2642	2642
1950 POP/AC.	1724	1724	1724
1950 POP/AC.	3120	3120	3120
1949 MED. FAM. INCOME	10663	10663	10663
1949 MED. FAM. INCOME	10663	10663	10663
1950 URBAN CLASS	-	-	INDEPENDENT
1950 URBAN AREA RANK	-	-	-
JAN MEAN TEMPERATURE	29	29	29
JULY MEAN TEMPERATURE	78	78	78
MEAN ANNUAL PRECIPITATION	27	27	27
MEAN ANNUAL PRECIPITATION	M	M	M
LAND RESOURCE REGION	-	-	-
WATER SOURCE	SURFACE	SURFACE	SURFACE
TOTAL RAPIDS	109 PPM	109 PPM	109 PPM
NON-CARBONATE HARDNESS	62 PPM	62 PPM	62 PPM
FLUORIDATION STATUS	FLOUIDATED	FLOUIDATED	FLOUIDATED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960			1970		
	WM	WF	NF	WM	WF	NF	WM	WF	NF
LT 1	373	331	3	375	347	8	339	292	6
1-4	1506	1489	40	1457	1475	42	1161	1136	38
5-9	1525	1576	40	1764	1676	43	1658	1574	44
10-14	1276	1147	28	1680	1646	46	1646	1646	44
15-19	1087	1242	26	1186	1376	29	1663	1696	42
20-24	1071	1462	23	918	1000	22	1401	1704	26
25-29	1305	1590	31	920	1082	19	1428	1742	21
30-34	1387	1495	32	1043	1282	27	1382	1642	21
35-39	1382	1417	33	1193	1320	27	1382	1642	21
40-44	1282	1417	28	1193	1320	27	1382	1642	21
45-49	1088	1283	26	1128	1297	29	1006	1130	30
50-54	977	1160	19	1034	1220	19	1024	1178	16
55-59	962	1126	21	1034	1206	21	1046	1192	23
60-64	774	1014	21	795	1025	14	958	1206	22
65-69	684	853	18	760	1064	17	733	1091	21
70-74	507	677	7	570	938	10	509	868	10
75-79	464	661	14	383	597	15	378	770	13
80-84	0	0	0	178	334	1	233	470	4
85-UP	79	118	3	114	194	1	122	270	5
TOTALS	17745	20145	392	17657	20433	406	17673	20600	464
GRAND TOTAL			429			462			519
			38711			38958			39256

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	952.0	1580.0	1.138	952.0	1580.0	1.138	952.0	1580.0	1.138
CV-RENAL	507.0	918.0	0.977	507.0	918.0	0.977	507.0	918.0	0.977
HEART	357.0	640.0	0.941	357.0	640.0	0.941	357.0	640.0	0.941
NON CV-R	445.0	666.0	1.289	445.0	666.0	1.289	445.0	666.0	1.289
CANCER	141.0	230.0	1.038	141.0	230.0	1.038	141.0	230.0	1.038

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949-50			1959-61			1969-71		
	WM	WF	NF	WM	WF	NF	WM	WF	NF
TOTAL	464	488	952	490	566	1584	588	547	1685
CV-RENAL	282	265	507	289	332	297	315	297	905
HEART	170	187	357	198	249	193	221	207	607
NON CV-R	222	223	445	201	234	666	273	250	780
CANCER	77	64	141	68	88	230	75	87	248

CITY CHARACTERISTICS	MISSOURI	
	STATE	MISSOURI
1950 RANK BY POPULATION	308	2264
1950 POP/SQ. MILE	1368	2600
1949 MED. FAM. INCOME	7820	INDEPENDENT
1950 URBAN AREA RANK	34	76
JAN MEAN TEMPERATURE	76	43
JULY MEAN TEMPERATURE	76	131
MEAN ANN. PRECIPITATION	43	131
LAND RESOURCE REGION	N	SURFACE
WATER SOURCE	N	131
TOTAL HARDNESS	131	131
NON-CARBONATE HARDNESS	131	131
FLUORIDATION STATUS	NO ARTIFICIAL	LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

AGE GROUP	BY AGE, RACE, SEX AND CENSUS YEAR												CAUSE										
	1950						1960							1970						OBSERVED EXPECTED* OBS/EXP	1949-50	1959-61	1969-71
	WM	MF	NM	NP	HF	WM	MF	NM	NP	WM	MF	NM		NP									
LT 1	680	625	26	33	760	836	37	34	562	548	32	33											
1-4	2641	2621	108	92	2983	2936	135	115	2077	2114	89	121											
5-9	2619	2581	103	85	3454	3278	131	135	3179	3092	131	163											
10-14	2316	2193	120	101	3160	2981	123	101	3327	3139	175	156											
15-19	2075	2509	167	116	2244	2550	56	70	2865	2939	140	128											
20-24	2292	2935	176	96	1834	2268	57	64	2074	2539	75	73											
25-29	2759	2938	107	126	1884	2064	76	87	1795	1978	61	69											
30-34	2425	2613	75	114	2163	2360	58	59	1759	1714	50	70											
35-39	2508	2854	116	134	2308	2520	80	90	1575	1696	56	83											
40-44	2511	2667	96	100	2271	2440	65	75	1813	2018	59	63											
45-49	2495	2699	105	115	2305	2578	75	102	1924	2216	78	95											
50-54	2241	2516	115	113	2221	2450	67	66	1946	2163	52	69											
55-59	2035	2494	84	88	2201	2571	69	77	1849	2248	66	76											
60-64	1906	2123	94	89	1742	2250	57	85	1734	2175	52	54											
65-69	1582	1953	93	107	1597	2226	68	68	1498	2176	47	61											
70-74	1151	1536	49	58	1455	1787	49	47	1133	1781	36	61											
75-79#	1212	1614	43	33	941	1342	31	46	767	1451	39	37											
80-84#	0	0	0	0	496	804	16	30	541	895	18	34											
85-89	206	316	17	13	294	488	13	17	283	653	20	15											
TOTALS	35654	39787	1534	1613	36389	40653	1263	1368	32421	37535	1301	1434											
GRAND TOTAL			78588					79673				72691											

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

[illegible]

POPULATION										DEATHS AND DEATH RATIOS								
BY AGE, RACE, SEX AND CENSUS YEAR										BY CAUSE AND CENSUS PERIOD								
AGE GROUP	1950				1960				1970				CAUSE	TOTAL	1949-50	1959-61	1969-71	
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF						
IT 1	6434	6253	1715	1771	5708	5406	3414	3348	2590	2603	2666	2625			OBSERVED	20950.0	30703.0	29173.0
1-4	24600	23812	6267	6371	19701	18763	12893	12931	9365	8653	10703	10768			EXPECTED*	177221.4	27791.5	26716.0
5-9	21953	21586	6157	6276	17889	16955	13383	13266	12780	12339	14968	14964			OBS/EXP	1.217	1.105	1.092
10-14	18385	18309	5577	5753	17899	18001	9740	10166	13574	13037	16207	16515						
15-19	19259	22008	4057	5633	14755	18174	6279	7322	13309	14506	12947	13768						
20-24	26482	31031	5064	6993	16376	19123	5323	7390	12977	16041	8359	11193						
25-29	29159	30815	5975	7530	16511	15368	5928	8036	10676	10130	6824	8476			OBSERVED	11175.0	16705.0	15596.0
30-34	25102	25934	5995	7031	14548	14718	6344	8168	7572	7556	5620	7484			EXPECTED*	9377.6	15483.2	15678.6
35-39	25133	27869	6022	7381	14302	16051	6237	7861	7152	7721	5502	7763			OBS/EXP	1.192	1.079	0.995
40-44	25057	27804	5793	6496	13915	16995	5540	7042	8515	9735	5934	7747						
45-49	23471	26099	5444	5703	16091	19151	5622	6558	9626	11391	5689	7342						
50-54	21839	24666	4483	4405	16786	20105	5255	5866	9638	12592	5074	6315			OBSERVED	7863.0	11814.0	11285.0
55-59	19732	21953	3416	3156	16526	19791	4755	5313	10874	14246	4683	6027			EXPECTED*	6612.3	10728.8	10603.2
60-64	16487	19108	2496	2308	14209	17644	3543	3748	11011	14982	4262	5320			OBS/EXP	1.189	1.101	1.064
65-69	13076	16178	2080	2413	11917	16197	2837	3268	8824	13761	3765	4830						
70-74	8625	11333	1099	1278	9027	13300	1985	2108	6981	11997	2591	3133			NON CV-R	9775.0	13998.0	13577.0
75-79	7587	11410	873	1037	5827	9062	1163	1442	4821	9434	1456	1952			OBSERVED	7843.8	12308.3	11037.2
80-84	0	0	0	0	2761	5009	476	667	2676	6040	963	1162			EXPECTED*	1.246	1.137	1.230
85-UP	1063	2040	128	232	1340	2953	326	519	1513	3854	620	867			OBS/EXP			
TOTALS	333350	368998	72681	81767	247978	286026	101043	114979	164474	200518	118993	138251						
GRAND TOTAL				856796				750026				622236						
# AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED																		
															OBSERVED	3321.0	5182.0	4764.0
															EXPECTED*	2767.3	4233.9	3874.3
															OBS/EXP	1.200	1.224	1.230

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE	1950				1960			
	WM	HF	NM	HF	WM	HF	NM	HF
LT 1	367	352	0	0	410	399	1	2
1-4	1595	1490	3	0	1727	1639	4	9
5-9	1518	1487	1	1	2331	2254	4	6
10-14	1195	1184	3	1	2315	2128	6	3
15-19	1108	1123	2	9	1550	1655	0	2
20-24	1179	1244	0	20	1096	1260	4	4
25-29	1283	1505	8	18	1220	1302	4	10
30-34	1325	1538	5	9	1360	1556	4	5
35-39	1481	1765	5	10	1474	1737	8	7
40-44	1534	1746	4	10	1598	1934	6	9
45-49	1404	1630	7	14	1744	2050	7	13
50-54	1398	1599	6	12	1732	2000	12	8
55-59	1203	1231	5	3	1565	1885	5	10
60-64	856	958	0	2	1368	1616	4	7
65-69	636	792	4	2	1083	1429	2	4
70-74	352	548	2	1	776	1016	1	4
75-79*	352	564	0	0	447	608	2	3
80-84*	0	0	0	0	180	312	0	0
85-UP	61	126	1	1	105	207	0	1
TOTALS	18841	20882	56	113	24081	26987	74	107
GRAND TOTAL				39892				51249

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	697.0	1545.0	1584.0
EXPECTED*	739.0	1700.6	2101.6
OBS/EXP	0.943	0.908	0.754
CV-RENAL			
OBSERVED	410.0	877.0	889.0
EXPECTED*	409.5	978.7	1273.2
OBS/EXP	1.001	0.896	0.698
HEART			
OBSERVED	298.0	638.0	640.0
EXPECTED*	294.8	703.9	883.5
OBS/EXP	1.011	0.906	0.724
NON CV-R			
OBSERVED	287.0	668.0	695.0
EXPECTED*	329.4	721.9	828.4
OBS/EXP	0.871	0.925	0.839
CANCER			
OBSERVED	151.0	330.0	322.0
EXPECTED*	124.8	290.2	321.8
OBS/EXP	1.210	1.137	1.001

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-60 SUM
TOTAL	347	356	697	466	546	533	1504
CV-RENAL	199	211	410	260	318	299	877
HEART	141	157	298	183	234	221	658
NON CV-R	148	139	287	206	228	234	668
CANCER	76	75	151	97	115	118	310

CITY CHARACTERISTICS

STATE	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
ALABAMA	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
ALASKA	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
ARIZONA	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
ARKANSAS	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
CALIFORNIA	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
COLORADO	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
CONNECTICUT	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
DELAWARE	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
FLORIDA	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
GEORGIA	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
HAWAII	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
IDAHO	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810																			

50 FEB
FLUORIDATED IN 1963

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	290	325	1	5	679	598	16	16	484	469	20	20
1-4	1341	1319	19	20	2580	2510	41	31	1904	1758	71	64
5-9	1312	1233	16	18	2998	3075	40	24	3014	2863	88	62
10-14	1064	1057	18	12	2493	2592	21	34	3374	3433	70	67
15-19	878	1114	11	11	1658	2126	29	32	3022	3480	66	86
20-24	1041	1421	11	9	1238	1738	25	28	2424	2864	94	79
25-29	1262	1363	19	20	1467	1682	15	21	1873	1988	44	44
30-34	1314	1346	10	13	1794	1916	19	18	1541	1696	36	36
35-39	1228	1316	9	12	1941	1932	19	30	1595	1738	31	31
40-44	1158	1133	21	10	1754	1828	17	12	1795	1920	26	28
45-49	981	961	16	11	1514	1564	14	18	1723	1802	26	31
50-54	764	840	8	7	1249	1285	16	10	1642	1730	17	18
55-59	729	713	14	6	1066	1090	10	9	1315	1459	13	14
60-64	694	673	12	7	744	883	13	6	1127	1253	14	7
65-69	568	555	5	6	656	781	14	9	758	853	10	16
70-74	370	366	2	4	529	451	10	3	598	724	10	6
75-79*	302	322	0	0	162	212	1	3	362	603	7	2
80-84*	0	0	0	0	88	137	0	1	297	400	3	1
85-UP	55	51	0	1	88	137	0	1	188	267	2	1
TOTALS	15351	16108	203	172	25107	27114	324	306	28913	31416	638	614
GRAND TOTAL				31834				52851				61581

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	663.0	541.1	1.225		1347.0	1320.0	1.020		1500.0	1672.9	0.897	
CV-RENAL	321.0	293.8	1.093		702.0	712.9	0.985		685.0	956.9	0.716	
HEART	221.0	212.6	1.039		451.0	509.9	0.884		450.0	673.9	0.668	
NON CV-R	342.0	247.3	1.383		645.0	607.1	1.062		815.0	716.0	1.138	
CANCER	79.0	90.1	0.877		217.0	209.4	1.036		243.0	259.9	0.935	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE		MONTANA	
	STATE	SUM	1971	1969-71
1950 RANK BY POPULATION	380			69-71
1950 POP/50. MILE	7403			
1970 POP/50. MILE	4189		480	1500
1949 MED. FAM. INCOME	3926		200	685
1969 MED. FAM. INCOME	9403		125	450
URBAN CLASS	INDEPENDENT		280	815
1950 URBAN AREA RANK	-		80	243
JAN MEAN TEMPERATURE	22		70	
JULY MEAN TEMPERATURE	73			
MEAN ANN. PRECIPITATION	13			
LAND RESOURCE REGION	G			
WATER SOURCE	SURFACE			
TOTAL HARDNESS	148 PPM			
NON-CARBONATE HARDNESS	28 PPM			
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL			

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	304	293	2	2	279	298	4	4	201	183	7	5
1-4	1294	1254	4	7	1122	1187	19	19	760	709	22	16
5-9	1244	1249	8	5	1376	1313	13	23	1070	1005	24	28
10-14	1105	1076	6	5	1175	1225	5	9	1129	1176	25	21
15-19	865	983	6	5	859	1006	9	8	1081	1024	22	23
20-24	1049	1036	6	7	607	670	7	8	698	700	5	12
25-29	1225	1149	14	7	543	630	9	15	559	603	9	12
30-34	1306	1289	9	4	752	694	12	9	498	492	8	6
35-39	1379	1230	9	3	758	781	6	6	436	490	9	6
40-44	1345	1179	11	4	884	971	11	7	578	563	8	11
45-49	1200	1030	10	2	995	963	8	4	598	607	7	7
50-54	1093	954	17	7	854	828	8	3	681	787	8	5
55-59	1055	927	8	5	859	878	13	3	752	831	6	8
60-64	920	808	7	0	712	726	6	2	687	720	9	3
65-69	709	687	3	3	653	749	4	2	512	654	7	2
70-74	447	469	4	1	525	618	1	0	373	500	5	3
75-79*	338	439	5	2	290	380	2	0	249	443	0	2
80-84*	0	0	0	0	141	186	0	0	155	252	2	0
85-UP	49	72	0	1	55	80	0	0	78	139	1	1
TOTALS	16928	16124	131	68	13439	14183	137	118	11095	11918	184	171
GRAND TOTAL				33251				27877				23368

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	SUM		1959	1960	1961	SUM
TOTAL	644	634	1278		538	510	470	1518
CV-RENAL	339	315	655		281	284	264	829
HEART	233	218	451		195	182	143	558
NON CV-R	305	318	623		257	236	206	689
CANCER	79	77	156		81	72	61	214

69-71
SUM

1971

1970

1969

1968

1967

1966

1965

1964

1963

1962

1961

1960

1959

1958

1957

CITY CHARACTERISTICS

CODE

STATE	MONTANA
1950 RANK BY POPULATION	367
1950 POP/SG. MILE	6520
1970 POP/SG. MILE	4582
1970 MED. FAM. INCOME	3442
1949 MED. FAM. INCOME	612
URBAN POP. %	INDEPENDENT
1950 URBAN AREA RANK	14
JAN MEAN TEMPERATURE	14
JULY MEAN TEMPERATURE	62
MEAN ANN. PRECIPITATION	12
LAND RESOURCE REGION	F
WATER SOURCE	SURFACE
TOTAL HARDNESS	56 PPM
NON-CARBONATE HARDNESS	4 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1278.0	1518.0	1.320		1278.0	1518.0	1.320	
CV-RENAL	655.0	829.0	1.260		655.0	829.0	1.260	
HEART	451.0	558.0	1.239		451.0	558.0	1.239	
NON CV-R	623.0	689.0	1.106		623.0	689.0	1.106	
CANCER	156.0	214.0	1.372		156.0	214.0	1.372	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	1950 POP./SQ. MILE	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1949 MED. FAM. INCOME	1959 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS	NO. ARTIFICIAL
TOTAL	427	375	802	510	542	523	1575	542	561	560	1663	STATE	4560	4560	4088	3835	3835	9480	INDEPENDENT	22	69	14	E	SURFACE	151 PPM	23 PPM	NO ARTIFICIAL	
CV-RENAL	209	168	377	256	293	238	787	265	264	274	803	STATE	4560	4560	4088	3835	3835	9480	INDEPENDENT	22	69	14	E	SURFACE	151 PPM	23 PPM	NO ARTIFICIAL	
HEART	155	120	275	195	200	172	567	176	185	181	542	STATE	4560	4560	4088	3835	3835	9480	INDEPENDENT	22	69	14	E	SURFACE	151 PPM	23 PPM	NO ARTIFICIAL	
NON CV-R	218	207	425	254	249	285	788	277	297	286	860	STATE	4560	4560	4088	3835	3835	9480	INDEPENDENT	22	69	14	E	SURFACE	151 PPM	23 PPM	NO ARTIFICIAL	
CANCER	69	61	130	65	64	79	208	85	104	87	276	STATE	4560	4560	4088	3835	3835	9480	INDEPENDENT	22	69	14	E	SURFACE	151 PPM	23 PPM	NO ARTIFICIAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	MF	NF	WM	WF	NM	NF	MF	NF	WM	WF	NM	NF	MF	NF
LT 1	985	980	21	17	1698	1635	38	42	1239	1140	45	53	4437	4218	126	161	4437	4218
1-4	3499	3421	55	56	5898	5622	170	147	6266	6078	125	170	6266	6078	125	170	6266	6078
5-9	3120	3046	58	63	5900	5655	143	136	6266	6078	125	170	6266	6078	125	170	6266	6078
10-14	2538	2412	42	42	4689	4536	82	80	4689	4536	82	80	4689	4536	82	80	4689	4536
15-19	3529	4163	46	76	4708	5352	159	127	9867	9886	310	185	9867	9886	310	185	9867	9886
20-24	5864	5675	21	74	8968	8802	104	104	5864	5675	21	74	8968	8802	104	104	5864	5675
25-29	4674	4587	64	64	4674	4587	64	64	4674	4587	64	64	4674	4587	64	64	4674	4587
30-34	2286	2501	46	52	3988	4068	85	86	3988	4068	85	86	3988	4068	85	86	3988	4068
35-39	2963	3501	46	52	3975	3952	81	81	3975	3952	81	81	3975	3952	81	81	3975	3952
40-44	2963	3213	49	45	3277	3507	51	54	3277	3507	51	54	3277	3507	51	54	3277	3507
45-49	2432	2623	32	30	2569	3328	44	44	2569	3328	44	44	2569	3328	44	44	2569	3328
50-54	2008	2960	33	31	2821	3328	35	36	3204	3559	73	48	3204	3559	73	48	3204	3559
55-59	2262	2801	26	27	2442	3066	30	27	2743	3378	34	50	2743	3378	34	50	2743	3378
60-64	2009	2447	29	29	2207	2758	18	34	2507	3194	31	32	2507	3194	31	32	2507	3194
65-69	1600	2058	24	19	1851	2633	31	34	1870	2792	21	23	1870	2792	21	23	1870	2792
70-74	1220	1625	11	11	1474	2122	18	17	1502	2415	17	22	1502	2415	17	22	1502	2415
75-79*	1192	1712	11	12	1004	1537	12	7	1074	1950	7	21	1074	1950	7	21	1074	1950
80-84*	0	0	0	0	549	938	3	9	642	1272	4	11	642	1272	4	11	642	1272
85-89*	245	435	3	3	317	614	5	3	427	1000	6	11	427	1000	6	11	427	1000
TOTALS	46482	51013	706	683	60751	65370	1237	1163	70491	75540	1851	1636	70491	75540	1851	1636	70491	75540
GRAND TOTAL							128521					149518						

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1836.0	3504.0	0.524	3504.0	3883.1	0.902	3605.0	4567.8	0.789
CV-RENAL	964.0	1963.0	0.491	1963.0	2196.4	0.894	1921.0	2690.8	0.714
HEART	587.0	1249.0	0.471	1249.0	825.5	1.525	1868.9	0.659	0.810
NON CV-R	872.0	1541.0	0.566	1541.0	374.2	4.118	1684.0	1879.0	0.896
CANCER	337.0	566.0	0.595	566.0	321.0	1.763	701.0	1.034	0.961

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	BY CAUSE AND YEAR												CITY CHARACTERISTICS												CODE
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	NEBRASKA												
CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	NEBRASKA												
TOTAL	898	938	1836	1131	1163	1210	3504	1184	1178	1243	3605	1950 RANK BY POPULATION	109												
CV-PENAL	471	493	964	639	653	671	1963	628	636	657	1921	1950 POP./SQ. MILE	4155												
HEART	279	308	587	417	404	428	1249	395	416	421	1232	1949 MED. FAM. INCOME	3033												
NON CV-R	427	445	872	492	510	539	1541	556	542	586	1684	1969 MED. FAM. INCOME	3431												
CANCER	171	166	337	189	176	201	566	241	233	227	701	URBAN CLASS	9928												
												URBAN AREA	CENTRAL												
												1950 URBAN AREA PANK	120												
												JAN MEAN TEMPERATURE	25												
												JULY MEAN TEMPERATURE	79												
												MEAN ANN. PRECIPITATION	25												
												LAND RESOURCE REGION	M												
												WATER SOURCE	GROUND												
												TOTAL HARDNESS	206 PPM												
												NON-CARBONATE HARDNESS	32 PPM												
												FLUORIDATION STATUS	NO ADJUP												

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	2424	2382	220	172	3498	3468	457	464
1-4	9445	9289	781	752	12817	12503	1760	1757
5-9	8429	8337	768	671	14307	13899	1712	1692
10-14	7354	7034	606	608	11434	11353	1260	1197
15-19	7027	6216	497	603	8263	9960	789	804
20-24	8724	10335	603	737	8539	10118	789	942
25-29	10018	10386	632	747	8801	8815	897	1023
30-34	8375	9184	547	696	8854	9058	902	1013
35-39	8263	9031	555	677	9102	9386	795	882
40-44	7841	8368	520	617	7981	8781	629	715
45-49	7204	7564	542	533	7697	8320	604	631
50-54	7026	7367	554	490	7207	7920	511	552
55-59	6518	6596	419	333	6400	7015	471	481
60-64	5511	5550	369	277	5688	6558	393	395
65-69	4078	4258	304	270	4824	5815	336	327
70-74	2491	2893	166	146	3639	4482	253	244
75-79*	2342	3237	131	153	2101	2767	141	168
80-84*	0	0	0	0	943	1538	77	97
85-UP	463	666	19	27	544	1015	39	69
TOTALS	113533	120702	8373	8509	132559	142771	12815	13453
GRAND TOTAL				251117				301598

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	5157.0	4747.1	1.086		9256.0	8842.5	1.047		9800.0	10708.5	0.915	
CV-REVAL												
OBSERVED	2740.0				4953.0				5089.0			
EXPECTED*	2604.1				4834.1				6161.2			
OBS/EXP	1.052				1.025				0.826			
HEART												
OBSERVED	1923.0				3563.0				3613.0			
EXPECTED*	1856.9				3425.5				4287.9			
OBS/EXP	1.036				1.040				0.843			
NON CV-R												
OBSERVED	2417.0				4303.0				4711.0			
EXPECTED*	2143.4				4008.4				4547.2			
OBS/EXP	1.128				1.073				1.036			
CANCER												
OBSERVED	814.0				1518.0				1787.0			
EXPECTED*	766.0				1384.0				1613.9			
OBS/EXP	1.063				1.097				1.107			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				1959				1960				1961				59-61				1969				1970				1971				1972				69-71			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP								
TOTAL	2536	2621	1352	1368	3016	3105	3135	3239	3239	3304	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257	3257								
CV-REVAL	1352	1368	1352	1368	1697	1650	1702	1882	1660	1723	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706								
HEART	950	973	1923	1923	1697	1650	1702	1882	1660	1723	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706	1706								
NON CV-R	1184	1233	2417	2417	1419	1455	1433	1551	1579	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581								
CANCER	378	436	814	814	494	512	512	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586	586								

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION				1960 RANK BY POPULATION				1970 RANK BY POPULATION			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
NEBRASKA	40	40	40	40	40	40	40	40	40	40	40	40
1950 POP/SQ. MILE	6170	6170	6170	6170	6170	6170	6170	6170	6170	6170	6170	6170
1970 POP/SQ. MILE	4534	4534	4534	4534	4534	4534	4534	4534	4534	4534	4534	4534
1949 MED. FAM. INCOME	3449	3449	3449	3449	3449	3449	3449	3449	3449	3449	3449	3449
1969 MED. FAM. INCOME	10208	10208	10208	10208	10208	10208	10208	10208	10208	10208	10208	10208
URBAN CLASS	41	41	41	41	41	41	41	41	41	41	41	41
1950 URBAN AREA RANK	23	23	23	23	23	23	23	23	23	23	23	23
JAN MEAN TEMPERATURE	78	78	78	78	78	78	78	78	78	78	78	78
JULY MEAN TEMPERATURE	25	25	25	25	25	25	25	25	25	25	25	25
MEAN ANN. PRECIPITATION	23	23	23	23	23	23	23	23	23	23	23	23
LAND RESOURCE REGION	23	23	23	23	23	23	23	23	23	23	23	23
WATER RESOURCES	23	23	23	23	23	23	23	23	23	23	23	23
TOTAL DEATHS	23	23	23	23	23	23	23	23	23	23	23	23
NON-CARCINOMA DEATHS	23	23	23	23	23	23	23	23	23	23	23	23
FLUORIDATION STATUS	23	23	23	23	23	23	23	23	23	23	23	23

FLUORIDATED IN 1969

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	270	266	6	4	523	506	22	41	527	526	38	21
1-4	1107	1200	15	21	1829	1752	75	97	1983	2000	113	105
5-9	1001	955	18	11	2154	2008	71	83	2905	2752	160	163
10-14	822	746	19	11	1988	2021	45	58	2913	2737	111	155
15-19	772	875	16	12	1548	1706	37	40	2922	2994	131	140
20-24	1130	1211	30	29	1566	1718	72	89	3196	3476	138	141
25-29	1343	1473	32	41	1530	1508	78	72	2644	2472	122	109
30-34	1385	1490	33	27	1604	1786	64	81	2138	2059	109	119
35-39	1400	1528	29	32	1847	1957	71	53	1926	1948	104	89
40-44	1422	1351	27	28	1871	1799	70	61	2103	2208	102	124
45-49	1228	1067	28	26	1952	1698	57	54	2341	2471	93	93
50-54	920	940	19	19	1662	1609	62	19	2211	2220	110	78
55-59	944	783	10	8	1449	1258	45	32	2078	1977	85	77
60-64	784	698	14	9	1377	1216	41	28	1768	1939	64	41
65-69	561	539	8	7	1057	876	19	11	1378	1539	44	23
70-74	360	339	6	2	653	637	13	13	813	1087	22	17
75-79*	336	337	5	0	399	479	7	9	573	658	17	12
80-84*	0	0	0	0	198	212	4	2	290	438	4	13
85-89*	53	53	1	0	92	102	2	1	205	298	6	5
TOTALS	16112	15781	316	288	24869	24956	827	818	34573	35189	1571	1530
GRAND TOTAL				32497				51470				72863

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 765.0 EXPECTED* 585.2 OBS/EXP 1.307	1867.0 1441.1 1.296	2263.0 2201.5 1.028
CV-RENAL	OBSERVED 370.0 EXPECTED* 320.1 OBS/EXP 1.156	988.0 786.3 1.257	1085.0 1258.1 0.862
HEART	OBSERVED 280.0 EXPECTED* 233.1 OBS/EXP 1.201	747.0 569.5 1.312	767.0 894.3 0.658
NON CV-R	OBSERVED 395.0 EXPECTED* 265.1 OBS/EXP 1.490	879.0 634.8 1.342	1178.0 943.4 1.249
CANCER	OBSERVED 117.0 EXPECTED* 98.8 OBS/EXP 1.184	279.0 238.9 1.168	386.0 353.5 1.092

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	1959	1961	1966	1969	1971	1976
TOTAL	379	386	614	607	646	779	762	722
CV-RENAL	180	190	348	313	327	368	365	352
HEART	136	144	280	233	252	261	254	252
NON CV-R	199	196	266	294	319	411	397	370
CANCER	55	62	90	86	103	128	131	127

CITY CHARACTERISTICS

STATE	NEVADA
1950 RANK BY POPULATION	373
1950 POP/50. MILE	4642
1970 POP/50. MILE	2405
1949 MED. FAM. INCOME	4043
1969 MED. FAM. INCOME	11085
URBAN CLASS	INDEPENDENT
1950 URBAN ARTA RANK	-
JAN MEAN TEMPERATURE	31
JULY MEAN TEMPERATURE	69
MEAN ANN. PRECIPITATION	6
LAND RESOURCE REGION	D
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	40 BPM
NON-CARBONATE HARDNESS	16 BPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	MM	NP	WM	WF	MM	NP	WM	WF	MM	NP
LT 1	217	196	0	0	297	273	2	0	249	209	3	0
1-4	1008	951	2	1	1101	1018	2	2	850	834	8	4
5-9	957	916	0	2	1253	1196	0	2	1236	1201	4	11
10-14	840	773	5	3	1171	1143	2	2	1378	1288	10	9
15-19	785	920	7	1	763	940	2	3	1221	1360	5	7
20-24	759	1004	1	1	633	787	0	3	968	1176	4	9
25-29	904	955	3	1	787	782	1	6	923	882	6	4
30-34	908	952	2	0	805	849	2	3	749	700	5	5
35-39	951	1031	1	0	879	928	2	4	725	779	4	11
40-44	940	1057	2	0	870	927	0	2	774	844	6	2
45-49	971	998	1	0	926	958	1	0	832	933	5	3
50-54	858	1012	2	0	805	1026	1	2	806	923	3	2
55-59	798	887	1	1	849	963	1	0	771	886	0	2
60-64	672	779	2	1	674	894	1	0	698	930	0	4
65-69	578	730	1	2	609	772	2	0	598	817	1	0
70-74	452	651	0	0	450	711	1	0	435	767	0	0
75-79*	457	799	1	0	330	564	0	0	236	593	3	2
80-84*	0	0	0	0	166	396	0	0	183	490	0	0
85-89*	80	203	0	0	136	311	1	1	153	423	0	0
TOTALS	13135	14814	26	13	13504	15438	19	30	13845	16035	67	75
GRAND TOTAL			26	27688				28991				30022

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	608.0	1006.0	0.815	608.0	1006.0	0.789	1112.0	1112.0	1377.7
CV-RENAL	351.0	621.0	0.776	351.0	621.0	0.791	622.0	622.0	867.8
HEART	238.0	456.0	0.750	238.0	456.0	0.826	417.0	417.0	595.8
NON CV-R	257.0	385.0	0.876	257.0	385.0	0.784	490.0	490.0	509.9
CANCER	98.0	165.0	0.843	98.0	165.0	0.867	1092	1092	1.025

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SDM	1959	1960	1961	SDM	1969	1970	1971	SDM	1971
TOTAL	302	306	608	340	335	331	1006	384	379	349	1112	1112
CV-RENAL	177	174	351	217	192	212	621	219	207	196	622	622
HEART	114	124	238	158	140	152	450	149	136	132	417	417
NON CV-R	125	132	257	123	143	119	385	165	172	153	490	490
CANCER	39	59	98	55	59	51	165	88	63	52	203	203

CITY CHARACTERISTICS

STATE	NEW HAMPSHIRE	
	1950 RANK BY POPULATION	437
1950 POP/SQ. MILE	1970 POP/SQ. MILE	474
1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	3266
URBAN CLASS	URBAN CLASS	10092
1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	20
JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	69
LAND RESOURCE REGION	LAND RESOURCE REGION	37
WATER SOURCE	TOTAL HARDNESS	12 PPM
NON-CARBONATE HARDNESS	PLUOPIATION STATUS	5 PPM
UNCERTAIN		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
IT 1	817	806	1	2	926	928	8	6	708	719	4	7
1-4	3447	3351	6	5	3657	3687	17	23	2905	2821	25	20
5-9	3087	2973	3	3	4308	4053	14	11	4074	3991	31	28
10-14	2372	2473	12	9	4043	4039	13	4	4145	4081	7	23
15-19	2783	2689	9	3	2782	3145	6	11	3746	4008	16	16
20-24	2798	3214	16	7	2106	2439	18	19	3216	3646	15	18
25-29	3266	3489	12	9	2190	2400	21	19	2543	2589	13	21
30-34	3119	3266	11	3	2642	2927	11	7	2078	2071	12	9
35-39	2553	3066	8	1	2923	3216	10	8	1908	2139	17	20
40-44	2592	2877	3	0	2954	3193	2	6	2446	2679	11	14
45-49	2372	2642	2	0	2672	2851	7	3	2643	2898	7	6
50-54	2409	2944	6	2	2285	2720	5	2	2608	2832	6	2
55-59	2299	2558	3	2	2026	2429	2	2	2209	2480	6	3
60-64	1839	2088	2	1	1847	2505	1	0	1761	2295	3	3
65-69	1326	1647	4	1	1752	2275	1	2	1387	2070	5	5
70-74	946	1297	1	1	1215	1668	0	0	1207	1994	3	7
75-79*	918	1331	2	0	685	1046	0	0	853	1428	1	3
80-84*	0	0	0	0	326	601	0	2	429	877	0	2
85-UP	128	242	0	0	172	381	1	0	279	559	1	0
TOTALS	39345	43235	99	53	41518	46503	137	124	41185	46177	185	207
GRAND TOTAL				82732				88282				87754

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970				69-71	
	1949	1950	49-50	50	1959	1960	1961	59-61	1969	1970	1971	1971	59-71	50
TOTAL	1003	955	1958	1958	1024	1014	1006	3044	1167	1111	1102	3380	3380	3380
CV-R	576	582	1158	1158	506	615	601	1822	613	537	532	1682	1682	1682
NON-CV-R	427	424	800	824	441	448	423	1332	432	375	359	1166	1166	1166
CANCER	165	145	310	310	174	159	175	508	213	209	209	631	631	631

CITY CHARACTERISTICS

CODE

STATE	NEW HAMPSHIRE
1950 POP/1000	134
1950 POP/1000	2577
1970 POP/1000	2734
1949 MED. FAM. INCOME	3255
1969 MED. FAM. INCOME	9489
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	135
JAN MEAN TEMPERATURE	24
JULY MEAN TEMPERATURE	70
MEAN ANN. PRECIPITATION	39
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	12 PPM
NON-CARBONATE HARDNESS	8 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP
TOTAL	1958.0	3044.0	1.223	1.101	1.061	1.061
CV-R	1158.0	1822.0	1.289	1.155	0.900	0.900
HEART	824.0	1332.0	1.281	1.184	0.890	0.890
NON CV-R	800.0	1222.0	1.518	1.518	1.518	1.518
CANCER	310.0	508.0	1.645	1.645	1.645	1.645

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1-4	340	356	1	1	445	424	2	2	535	524	5	5
5-9	1529	1380	7	10	1751	1738	5	4	2517	2265	21	28
10-14	1356	1283	11	4	1963	1863	7	10	3171	2974	23	20
15-19	1166	1058	7	6	1847	1747	3	11	2837	2742	18	21
20-24	1084	1308	3	3	1199	1325	5	5	2151	2366	18	16
25-29	1091	1427	1	6	867	1072	9	5	1823	2520	33	33
30-34	1292	1424	2	5	1105	1171	4	4	2157	2097	22	21
35-39	1286	1392	1	3	1278	1364	1	10	1713	1656	17	12
40-44	1118	1258	4	3	1313	1456	4	7	1583	1516	19	19
45-49	1030	1240	1	3	1282	1340	1	3	1583	1635	7	17
50-54	1137	1190	8	2	1126	1221	1	3	1514	1611	9	7
55-59	1059	1164	1	3	951	1174	3	1	1403	1425	4	4
60-64	936	1037	2	1	983	1069	4	0	1057	1272	2	6
65-69	721	814	0	0	841	1041	6	2	887	1124	5	5
70-74	508	642	2	0	676	899	0	2	663	949	4	3
75-79*	379	478	1	0	475	662	0	1	516	820	9	1
80-84*	386	546	0	1	258	417	1	3	348	600	1	2
85-UP	0	0	0	0	138	244	0	0	177	330	0	0
	63	106	0	0	85	154	1	0	107	224	0	1
TOTALS	16461	18103	54	51	18583	20381	57	75	26742	28650	207	221
GRAND TOTAL				34669				39096				55820

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	822.0	1306.0	1.449.0	659.7	1159.3	1.449.1	1.246	1.127	1.000
CV-RENAL									
OBSERVED	508.0	747.0	794.0						
EXPECTED*	369.6	653.1	814.0						
OBS/EXP	1.374	1.144	0.975						
HEART									
OBSERVED	360.0	456.0	504.0						
EXPECTED*	264.2	466.0	575.7						
OBS/EXP	1.363	0.979	0.875						
NON CV-R									
OBSERVED	314.0	559.0	655.0						
EXPECTED*	290.0	506.2	635.1						
OBS/EXP	1.083	1.104	1.031						
CANCER									
OBSERVED	101.0	214.0	268.0						
EXPECTED*	107.7	188.1	227.7						
OBS/EXP	0.938	1.138	1.177						

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	395	427	822	506	445	426	435	1306	497	472	480	1449
CV-RENAL	238	270	506	366	251	239	257	747	288	245	261	794
HEART	161	199	366	314	145	147	164	456	189	150	165	504
NON CV-R	157	157	314	101	194	187	178	559	209	227	219	655
CANCER	57	44	101		70	65	79	214	87	96	85	268

CITY CHARACTERISTICS

STATE	NEW HAMPSHIRE	
	1950 RANK BY POPULATION	352
1950 POP/50. MILE	1108	
1970 POP/50. MILE	1778	
1949 MED. FAM. INCOME	3201	
1969 MED. FAM. INCOME	10866	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	24	
JULY MEAN TEMPERATURE	70	
MEAN ANN. PRECIPITATION	39	
LAND RESOURCE REGION	R	
WATER SOURCE	GROUND AND SURFACE	
TOTAL HARDNESS	25 PPM	
NON-CARBONATE HARDNESS	7 PPM	
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	285	275	136	115	222	219	229	264	91	91	197	192
1-4	1376	1294	623	568	1005	874	983	958	397	368	864	843
5-9	1326	1298	579	597	1102	1081	1083	1057	570	579	1283	1307
10-14	1209	1064	489	538	1270	1159	932	906	734	776	1892	1923
15-19	1665	1154	492	526	967	1000	651	673	533	651	553	532
20-24	1228	1446	552	717	714	741	563	733	533	651	572	749
25-29	1374	1592	622	730	759	766	558	829	408	418	572	713
30-34	1421	1711	501	666	835	862	712	820	364	351	468	713
35-39	1473	1826	571	745	1076	1162	712	820	355	410	467	658
40-44	1494	1745	625	763	1076	1323	582	718	652	652	503	676
45-49	1449	1812	632	763	1110	1393	551	749	657	848	553	708
50-54	1633	1822	632	652	1164	1450	538	673	750	1008	432	559
55-59	1436	1641	463	570	1294	1606	557	637	791	1068	390	608
60-64	1067	1641	300	381	1266	1811	539	594	847	1335	410	596
65-69	724	1034	300	358	1335	1864	449	459	990	1665	399	612
70-74	724	938	172	187	1228	1517	290	348	1018	1773	308	432
75-79	600	923	129	161	652	862	156	203	784	1184	174	285
80-84	0	0	0	0	281	409	94	104	468	660	173	112
85-UP	90	162	21	33	156	247	39	51	232	403	77	112
TOTALS	20743	24052	7898	8964	17362	20487	10204	11491	11278	14873	9742	11966
GRAND TOTAL				61657				59544				47859

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				69-71	
	1949	1950	1950	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM	SUM	SUM
TOTAL	974	1001	1175	3150	1021	1041	1033	3095	1121	1104	1056	3281	3281	3281
CV-RENAL	556	557	577	1690	631	640	609	1880	671	686	654	2011	2011	2011
HEART	411	429	480	1320	484	477	466	1427	523	538	524	1585	1585	1585
NON CV-R	418	444	462	1324	390	401	424	1215	400	416	426	1242	1242	1242
CANCER	148	175	323	646	161	160	207	528	187	165	161	513	513	513

CITY CHARACTERISTICS

CODE

NEW JERSEY

STATE	1950 RANK BY POPULATION	1361
1950 POP/1000	1361	3860
1970 POP/1000	1949 MED. FAM. INCOME	2028
1969 MED. FAM. INCOME	1950 URBAN AREA RANK	118
URBAN CLASS	JAN MEAN TEMPERATURE	35
CENTRAL	JULY MEAN TEMPERATURE	73
118	MEAN ANN. PRECIPITATION	41
35	LAND RESOURCE REGION	S
73	WATER SOURCE	GROUND AND SURFACE
41	TOTAL HARDNESS	10 PPM
S	NON-CARBONATE HARDNESS	6 PPM
GROUND AND SURFACE	FLUORIDATION STATUS	FLUORIDATED IN 1958

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

1949-50 1959-61 1969-71

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1775.0	3095.0	1.317	1499.9	2842.3	1.089	1381.0	3022.3	1.066
CV-RENAL	1113.0	1880.0	1.317	845.4	1660.5	1.071	2011.0	1877.9	1.071
HEART	840.0	1427.0	1.426	599.1	1264.6	1.262	1596.0	1270.0	1.110
NON CV-R	862.0	1215.0	1.317	654.4	1181.5	1.028	1144.4	1140.4	1.110
CANCER	323.0	528.0	1.324	243.2	434.7	1.191	513.0	434.7	1.180

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	676	618	21	25	674	629	33	36	476	496	34	49
1-4	2996	2733	77	83	2738	2572	155	123	1905	1899	151	166
5-9	2845	2750	64	93	3230	3028	153	141	2681	2520	223	201
10-14	2250	2068	96	60	3078	2853	120	123	2842	2634	416	200
15-19	2461	2325	77	76	2433	2425	93	61	2964	2937	156	145
20-24	3159	3175	107	101	1820	2068	93	98	2166	2024	191	195
25-29	3295	3175	100	157	2133	2058	116	102	2166	2024	191	195
30-34	3591	3569	66	57	2485	2438	113	102	1593	1552	83	94
35-39	3591	3398	64	60	2485	2438	99	102	1573	1549	79	87
40-44	2582	2473	64	60	2950	3078	65	68	2030	2274	79	111
45-49	2249	2445	57	56	2729	2755	61	89	2391	2513	79	102
50-54	2169	2421	54	49	2073	2152	56	56	2649	2953	60	79
55-59	2221	2065	29	24	1751	1871	50	60	2397	2556	40	60
60-64	1704	1579	24	24	1507	1851	37	31	1757	1974	53	77
65-69	1166	1083	15	23	1462	1606	21	20	1151	1529	37	48
70-74	565	539	11	9	992	1067	12	20	855	1404	17	24
75-79	463	507	10	13	515	578	9	8	661	1000	8	21
80-84	0	0	0	0	154	256	2	6	321	491	3	13
85-UP	66	86	5	2	86	110	1	3	136	211	2	9
TOTALS	38119	37193	943	948	35537	36204	1230	1244	33311	36069	1557	1806
GRAND TOTAL				77203				74215				72743

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1444.0	1114.7	1.295		2508.0	1957.6	1.281		2474.0	2347.7	1.054	
CV-RENAL	809.0	571.7	1.415		1517.0	1053.6	1.439		1478.0	1344.7	1.099	
HEART	633.0	421.1	1.503		1239.0	769.1	1.611		1244.0	962.1	1.293	
NON CV-R	635.0	543.0	1.169		991.0	904.1	1.096		996.0	1003.0	0.993	
CANCER	252.0	194.1	1.298		462.0	339.6	1.360		496.0	394.1	1.258	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949				1950				1959				1961				1969				1971				SUM			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	707	737	429	1444	380	429	809	1404	860	860	839	2508	847	806	821	2474	508	487	483	1478	426	403	415	1244	339	319	348	496
CV-RENAL	301	332	633	633	327	308	318	327	346	318	327	1239	339	319	164	496	339	319	164	496	339	319	164	496	339	319	164	496
HEART	301	332	633	633	327	308	318	327	346	318	327	1239	339	319	164	496	339	319	164	496	339	319	164	496	339	319	164	496
NON CV-R	327	308	635	252	308	327	318	327	346	318	327	1239	339	319	164	496	339	319	164	496	339	319	164	496	339	319	164	496
CANCER	139	113	113	113	139	113	143	143	170	170	143	462	170	143	143	462	170	143	143	462	170	143	143	462	170	143	143	462

NO ARTIFICIAL LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	277	253	11	3	333	357	9	8
1-4	1233	1288	29	34	1316	1328	32	24
5-9	1362	1215	33	37	1422	1073	34	27
10-14	589	562	33	33	1178	1073	33	33
15-19	589	562	29	47	1178	1132	39	39
20-24	1892	1298	24	38	860	1079	20	32
25-29	1552	1417	26	36	1119	1084	20	22
30-34	1229	1424	24	33	1212	1278	22	31
35-39	1258	1338	35	39	1222	1375	18	33
40-44	1167	1220	27	28	1199	1419	22	23
45-49	1056	1021	22	26	1209	129	25	27
50-54	964	1015	25	17	1103	1142	13	28
55-59	830	770	10	10	938	929	26	22
60-64	840	628	8	13	731	779	15	14
65-69	433	462	10	16	573	579	11	14
70-74	251	321	4	7	374	477	10	12
75-79*	242	319	5	5	230	270	3	3
80-84*	0	0	0	0	79	134	2	3
85-UP	35	56	1	0	46	69	1	2
TOTALS	15320	15903	370	426	16608	17632	358	407
GRAND TOTAL				32019				35065

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	525.0	499.2	1.052	525.0	499.2	1.053	1044.0	1063.1	0.962
CV-RENAL	295.0	265.7	1.110	295.0	265.7	1.185	587.0	606.2	0.968
HEART	245.0	192.7	1.271	245.0	192.7	1.245	485.0	430.4	1.127
NON CV-R	230.0	233.5	0.985	230.0	233.5	0.899	457.0	456.9	1.000
CANCER	91.0	84.4	1.078	91.0	84.4	1.108	206.0	172.1	1.197

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50	59-61
	WM	WF	WM	WF
TOTAL	257	268	525	525
CV-RENAL	138	157	295	295
HEART	115	130	245	245
NON CV-R	119	111	230	230
CANCER	52	39	91	91

CITY CHARACTERISTICS

STATE	NEW JERSEY
1950 POP/1000	375
1970 POP/1000	10006
1949 MED. FAM. INCOME	10189
1969 MED. FAM. INCOME	3934
URBAN CLASS	11309
1950 URBAN AREA RANK	PRINCE
JAN MEAN TEMPERATURE	1
JULY MEAN TEMPERATURE	28
MEAN ANN. PRECIPITATION	73
LAND RESOURCE REGION	39
WATER SOURCE	R
TOTAL HARDNESS	SURFACE
NON-CARBONATE HARDNESS	25 PPM
FLUORIDATION STATUS	14 PPM
	NO ARTIFICIAL, LOW NATURAL

BLOOMFIELD
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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	385	423	6	8	488	525	3	6
1-4	1809	1759	34	37	1744	1776	44	28
5-9	1761	1771	27	35	2067	2019	29	39
10-14	1366	1304	21	27	1334	1266	27	28
15-19	1321	1295	24	28	1234	1206	27	28
20-24	1262	1298	42	31	1264	1525	18	25
25-29	1849	2030	38	38	1579	1569	25	29
30-34	1888	2074	31	38	1816	1762	32	30
35-39	1891	2168	31	35	1707	1982	22	25
40-44	1951	2107	42	32	1812	2016	18	21
45-49	1715	1807	31	35	1784	2084	26	33
50-54	1657	1692	19	24	1734	1891	32	23
55-59	1270	1376	19	18	1480	1603	22	19
60-64	1660	1199	11	18	1204	1448	14	22
65-69	737	867	8	11	879	1266	9	10
70-74	427	672	9	7	688	902	11	12
75-79	406	712	10	8	410	630	2	5
80-84	0	0	0	0	161	346	3	2
85-UP	67	148	0	2	92	183	0	4
TOTALS	23134	25283	437	453	24112	27000	364	391
GRAND TOTAL			49307	51867				

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	881.0	1599.0	0.553	881.0	1599.0	0.553	881.0	1599.0	0.553
CV-RENAL	497.0	958.0	0.518	497.0	958.0	0.518	497.0	958.0	0.518
HEART	376.0	744.0	0.507	376.0	744.0	0.507	376.0	744.0	0.507
NON CV-R	384.0	641.0	0.599	384.0	641.0	0.599	384.0	641.0	0.599
CANCER	166.0	298.0	0.557	166.0	298.0	0.557	166.0	298.0	0.557

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1961				1969				1971				1970				1969-71			
	1949	1950	1951	SUM	1959	1960	1961	SUM	1961	1962	1963	SUM	1969	1970	1971	SUM	1971	1972	1973	SUM	1970	1971	1972	SUM	1969-71	1970	1971	SUM
TOTAL	422	459	497	1378	466	560	543	1569	543	560	583	1686	583	590	559	1732	559	583	590	1732	559	583	590	1732	1732	1732	1732	1732
CV-RENAL	220	277	214	711	301	334	323	958	323	334	338	995	338	332	333	1003	333	338	332	1003	333	338	332	1003	1003	1003	1003	1003
HEART	162	214	182	558	240	256	247	743	247	256	263	766	263	266	262	791	262	266	266	791	262	266	266	791	791	791	791	791
NON CV-R	202	182	384	768	195	226	220	641	220	226	258	704	258	258	226	729	226	258	258	729	226	258	258	729	729	729	729	729
CANCER	78	68	166	312	86	103	109	298	109	103	127	339	127	132	117	376	117	132	132	376	117	132	132	376	376	376	376	376

CITY CHARACTERISTICS

STATE	NEW JERSEY	
	1950 RANK BY POPULATION	1950 RANK BY POPULATION
1950 POP/SQ. MILE	9131	9131
1970 POP/SQ. MILE	9635	9635
1949 MED. FAM. INCOME	4057	4057
1969 MED. FAM. INCOME	11733	11733
URBAN CLASS	FRINGE	FRINGE
1950 URBAN AREA RANK	1	1
JAN MEAN TEMPERATURE	28	28
JULY MEAN TEMPERATURE	73	73
MEAN ANN. PRECIPITATION	39	39
LAND RESOURCE REGION	R	R
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	25 PPM	25 PPM
NON-CARBONATE HARDNESS	14 PPM	14 PPM
FLOODATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	988	956	188	197	934	913	486	460
1-4	4302	4083	769	818	3506	3363	1737	1758
5-9	4364	4123	853	874	3615	3511	1737	1764
10-14	3406	3240	738	738	3683	3587	1351	1387
15-19	3213	3357	641	654	3067	3303	949	1050
20-24	3879	4499	670	840	2560	2800	763	1053
25-29	4632	5021	753	819	2619	2895	926	1146
30-34	4570	4686	643	766	2765	2719	943	1111
35-39	4183	4310	660	672	2944	3207	923	1035
40-44	3552	3601	595	606	3083	3386	746	847
45-49	3049	3223	565	583	3081	3266	691	698
50-54	3182	3189	504	470	2583	2690	526	554
55-59	3059	3044	318	306	2439	2594	521	532
60-64	2495	2417	268	231	2143	2143	351	408
65-69	1841	1859	205	203	1969	2163	292	324
70-74	1103	1207	115	107	1414	1603	193	191
75-79*	911	1162	90	83	790	960	111	123
80-84*	0	1	0	0	293	412	34	63
85-UP	91	175	17	24	155	239	25	27
TOTALS	52820	54152	8592	8991	43643	45624	13361	14531
GRAND TOTAL				124555				117159

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50			59-61		
	1949	1950	SUM	1959	1961	SUM
TOTAL	1395	1396	2791	1395	1435	4229
CV-RENAL	720	811	1531	824	848	1672
HEART	517	628	1145	663	694	1357
NON CV-R	675	585	1260	511	587	1098
CANCER	239	211	450	222	243	694

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	2791.0	2096.7	1.331	4229.0	3502.7	1.207	3895.0	3024.5	1.137
CV-RENAL									
OBSERVED	1531.0			2466.0			2063.0		
EXPECTED*	1098.6			1851.3			1871.5		
OBS/EXP	1.394			1.332			1.102		
HEART									
OBSERVED	1145.0			1938.0			1662.0		
EXPECTED*	787.9			1310.6			1287.6		
OBS/EXP	1.453			1.479			1.291		
NON CV-R									
OBSERVED	1260.0			1763.0			1832.0		
EXPECTED*	998.1			1651.4			1553.0		
OBS/EXP	1.262			1.068			1.180		
CANCER									
OBSERVED	450.0			694.0			659.0		
EXPECTED*	345.0			552.2			510.2		
OBS/EXP	1.305			1.257			1.292		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	NEW JERSEY	
	1950 RANK BY POPULATION	1960 RANK BY POPULATION
1950 POP/SQ. MILE	14483	14483
1970 POP/SQ. MILE	11395	11395
1949 MED. FAM. INCOME	3241	3241
1969 MED. FAM. INCOME	7954	7954
URBAN CLASS	PRINGE	PRINGE
1950 URBAN AREA RANK	4	4
JAN MEAN TEMPERATURE	32	32
JULY MEAN TEMPERATURE	81	81
MEAN ANN. PRECIPITATION	33	33
LAND RESOURCE REGION	S	S
WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE
TOTAL HARDNESS	80 PPM	80 PPM
NON-CARBONATE HARDNESS	38 PPM	38 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	639	620	2	2	828	779	1	2	535	665	5	9
1-4	2933	2574	5	13	3677	3082	6	21	1968	1917	18	16
5-9	4704	2360	10	11	3681	3592	2	9	2905	2837	22	27
10-14	4732	1935	10	7	3633	3456	2	9	3367	3384	12	32
15-19	1532	1525	4	4	3378	2495	4	11	3356	3345	23	14
20-24	1925	2346	4	5	1635	2119	5	16	2677	3183	10	24
25-29	2935	3314	9	12	2257	2433	6	16	2368	2434	15	26
30-34	3081	3297	9	16	2729	3023	3	12	1810	1823	21	27
35-39	2906	2931	6	10	3381	3735	7	12	1869	2062	18	20
40-44	2480	2450	3	7	3361	3567	11	9	2518	3035	12	19
45-49	2116	2138	7	6	3081	3183	8	7	3268	3628	8	14
50-54	2012	2070	5	6	2648	2588	4	10	3231	3545	14	17
55-59	1673	1658	1	0	2060	2207	3	4	2857	3143	6	6
60-64	1322	1309	1	1	1773	1862	1	2	2264	2436	4	6
65-69	950	975	0	3	1329	1567	1	0	1488	1915	7	6
70-74	541	594	2	2	935	1143	2	1	1126	1566	1	5
75-79*	398	523	0	0	514	651	1	0	706	1177	4	1
80-84*	0	0	0	0	249	365	0	0	424	675	1	1
85-UP	50	91	0	0	107	163	0	0	221	414	1	1
TOTALS	31788	32550	78	95	39866	42015	67	136	38969	42984	202	282
GRAND TOTAL				64511				82084				82437

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	946.0	2024.0	0.994		946.0	2024.0	0.994		946.0	2024.0	0.994	
CV-RENAL	493.0	1150.0	1.003		493.0	1150.0	1.003		493.0	1150.0	1.003	
HEART	340.0	866.0	0.940		340.0	866.0	0.940		340.0	866.0	0.940	
NON CV-R	453.0	874.0	0.984		453.0	874.0	0.984		453.0	874.0	0.984	
CANCER	184.0	424.0	1.114		184.0	424.0	1.114		184.0	424.0	1.114	
	165.2	367.3	1.154		165.2	367.3	1.154		165.2	367.3	1.154	
	0.984	0.892			0.984	0.892			0.984	0.892		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1959				1969				1971			
	1949	1950	49-50	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM	1971	1971	SUM	69-71
TOTAL	449	497	946	2024	649	673	702	2024	940	829	796	2565	796	796	2565	2565
CV-RENAL	213	280	493	1150	387	389	374	1150	563	506	453	1522	453	453	1522	1522
HEART	147	193	340	666	285	284	287	866	425	394	337	1156	337	337	1156	1156
NON CV-R	236	217	453	874	262	284	328	874	377	363	343	1043	343	343	1043	1043
CANCER	34	50	184	424	132	143	149	424	183	185	179	547	179	179	547	547

CITY CHARACTERISTICS

STATE	NEW JERSEY	
	1950 RANK BY POPULATION	1960 RANK BY POPULATION
1950 RANK BY POPULATION	18514	18514
1960 RANK BY POPULATION	2886	2886
1970 RANK BY POPULATION	4215	4215
1949 MED. FAM. INCOME	11947	11947
1959 MED. FAM. INCOME	FRANCE	FRANCE
URBAN CLASS	30	30
URBAN AREA RANK	74	74
JAN MEAN TEMPERATURE	48	48
JULY MEAN TEMPERATURE	R	R
MEAN ANN. PRECIPITATION	45	45
LAND RESOURCE REGION	22	22
WATER SOURCE	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL
TOTAL HARDNESS	45 PPM	45 PPM
NON-CARBONATE HARDNESS	22 PPM	22 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	540	537	91	102	530	481	218	227	161	173	407	428
1-4	2225	2119	272	296	1503	1594	856	884	542	519	1501	1604
5-9	2077	1897	267	291	1467	1540	884	940	683	693	2125	2166
10-14	1417	1417	271	257	1551	1508	727	759	772	690	1978	2091
15-19	1575	1733	255	326	1505	1603	432	583	909	1100	1535	1762
20-24	2183	2713	384	470	1535	2012	466	746	1412	1635	1433	2136
25-29	2756	3086	480	526	1992	1835	728	936	1168	1046	1586	1984
30-34	2571	2873	394	470	1822	1632	865	932	1409	1251	1409	1751
35-39	2383	2929	372	455	1690	1854	815	875	700	607	1291	1546
40-44	2431	2878	376	407	1597	1928	717	779	901	898	1252	1423
45-49	2302	2814	340	395	1695	2155	604	675	993	1096	1054	1258
50-54	2343	2859	242	289	1892	2433	510	578	1031	1357	893	1109
55-59	2174	2689	191	191	1855	2452	433	499	1192	1551	687	883
60-64	1808	2264	117	167	1873	2341	310	343	1229	1668	552	633
65-69	1406	2030	77	137	1574	2099	223	249	987	1562	398	597
70-74	958	1483	48	70	1114	1648	134	174	925	1570	284	347
75-79#	797	1543	51	49	643	1197	70	104	553	1110	114	202
80-84#	0	0	0	0	355	711	27	55	341	727	95	135
85-89	130	279	7	8	187	436	23	40	184	484	80	125
TOTALS	32076	38143	4235	4886	26380	31459	9042	10378	15525	19132	18634	22180
GRAND TOTAL				79340				77259				75471

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970			
	1949	1950	1959	1960	1959	1960	1961	1961	1969	1970	1971	1971
TOTAL	908	930	1003	1055	1003	1055	1060	3118	722	627	627	1976
CV-RENAL	507	524	597	603	597	603	608	1808	389	326	342	1057
HEART	361	395	454	465	454	465	476	1395	293	235	285	919
NON CV-R	401	406	406	452	406	452	452	1310	333	301	285	919
CANCER	166	173	166	199	166	199	216	581	150	135	120	405

CITY CHARACTERISTICS

CODE

STATE	NEW JERSEY
1950 RANK BY POPULATION	143
1950 POP./SQ. MILE	20344
1970 POP./SQ. MILE	19352
1949 MED. FAM. INCOME	4005
1969 MED. FAM. INCOME	10125
DREAM CLASS AREA RANK	FRANCE
1950 DREAM AREA RANK	28
JULY MEAN TEMPERATURE	73
MEAN ANNUAL PRECIPITATION	39
LAND RESOURCE REGION	R
WATER SOURCE	GROUND
TOTAL HARDNESS	139 PPM
NON-CARBONATE HARDNESS	37 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	1838.0	3118.0	1976.0
EXPECTED*	1787.0	3206.6	3294.8
OBS/EXP	1.029	0.972	0.600
CV-RENAL			
OBSERVED	1031.0	1808.0	1057.0
EXPECTED*	1014.9	1895.3	1908.6
OBS/EXP	1.016	0.975	0.554
HEART			
OBSERVED	756.0	1395.0	781.0
EXPECTED*	717.6	1288.8	1286.7
OBS/EXP	1.053	1.082	0.607
NON CV-R			
OBSERVED	807.0	1310.0	919.0
EXPECTED*	772.1	1351.4	1386.2
OBS/EXP	1.045	0.969	0.663
CANCER			
OBSERVED	339.0	581.0	405.0
EXPECTED*	293.7	498.2	470.5
OBS/EXP	1.154	1.165	0.861

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	964	876	98	104	950	912	197	212	727	684	236	248
1-4	3876	3760	332	376	3444	3394	715	748	2509	2428	953	997
5-9	3777	3778	338	389	3759	3675	753	696	3275	3300	1275	1246
10-14	2987	2964	299	325	3695	3570	532	621	3586	3386	1079	1100
15-19	2866	3123	262	296	2821	3178	390	473	3239	3492	768	829
20-24	3586	4233	309	387	2481	2899	430	520	3319	4051	664	866
25-29	4580	4975	372	379	2985	2825	485	521	3196	3173	655	879
30-34	4628	4888	308	309	3139	3241	415	484	2600	2430	632	716
35-39	4344	4500	262	297	3342	3600	386	427	2306	2534	509	585
40-44	3806	3719	265	261	3412	3789	331	345	2893	3031	429	495
45-49	3409	3336	279	248	3378	3729	258	285	3126	3357	374	427
50-54	3238	3444	187	172	3134	3098	242	260	3102	3609	311	366
55-59	3109	3121	101	98	2858	2794	211	221	3052	3576	226	318
60-64	2615	2571	96	78	2369	2684	145	134	2673	2966	203	234
65-69	1822	1900	55	62	2068	2402	85	115	1931	2494	209	218
70-74	1063	1240	29	34	1434	1749	61	69	1366	2082	84	125
75-79#	855	1075	23	26	757	999	35	35	953	1498	47	72
80-84#	0	0	0	0	326	480	12	18	533	911	26	36
85-UP	126	196	4	7	168	280	5	8	271	487	31	40
TOTALS	51651	53699	3619	3848	46520	49298	5688	6192	44657	49489	8711	9797
GRAND TOTAL				112817				107698				112654

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL				TOTAL				TOTAL			
CV-RENAL	OBSERVED				2319.0				3800.0			
	EXPECTED*				1904.9				3252.8			
	OBS/EXP				1.217				1.168			
CV-RENAL	OBSERVED				1270.0				2208.0			
	EXPECTED*				1011.8				1775.3			
	OBS/EXP				1.255				1.244			
HEART	OBSERVED				906.0				1618.0			
	EXPECTED*				734.3				1275.4			
	OBS/EXP				1.234				1.269			
NON CV-R	OBSERVED				1049.0				1592.0			
	EXPECTED*				993.2				1477.6			
	OBS/EXP				1.174				1.077			
CANCER	OBSERVED				398.0				586.0			
	EXPECTED*				322.3				536.9			
	OBS/EXP				1.235				1.278			
CANCER	OBSERVED				398.0				586.0			
	EXPECTED*				322.3				536.9			
	OBS/EXP				1.235				1.278			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

NEW JERSEY

STATE	91
1950 BANK BY POPULATION	91
1950 POP/SQ. MILE	9642
1970 POP/SQ. MILE	9629
1949 MED. FAM. INCOME	3792
1969 MED. FAM. INCOME	10282
URBAN CLASS	PRINCE
1950 URBAN AREA RANK	1
JAN MEAN TEMPERATURE	30
JULY MEAN TEMPERATURE	75
MEAN ANN. PRECIPITATION	47
LAND RESOURCE REGION	R
WATER SOURCE	GROUND AND SURFACE
TOTAL HAPDNFSS	151 PPM
NON-CARBONATE HARDNESS	47 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				49-50				59-61				1969				1970				1971				SUM				69-71																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					1960					1970				
	WM	WF	NM	NF		WM	WF	NM	NF		WM	WF	NM	NF	
LT 1	251	211	6	5		298	293	2	5		216	258	3	6	
1-4	1077	1043	4	19		1054	1048	15	21		907	871	12	13	
5-9	1061	1105	10	15		1154	1179	14	18		1105	997	16	19	
10-14	688	719	12	10		1187	1128	14	21		1119	1096	17	36	
15-19	757	803	12	13		866	980	7	15		1054	1179	22	23	
20-24	912	1162	14	18		720	956	10	12		1149	1448	13	20	
25-29	1342	1403	21	15		959	915	8	13		1192	1030	13	13	
30-34	1413	1469	15	12		971	1037	10	13		671	693	11	13	
35-39	1283	1256	6	17		1168	1214	9	10		665	745	9	15	
40-44	950	927	14	18		1206	1293	11	9		886	929	15	15	
45-49	719	730	16	10		1039	1112	3	14		1055	1222	15	10	
50-54	701	878	7	4		876	837	14	14		1154	1316	21	18	
55-59	787	765	1	4		631	582	11	6		1028	1152	1	13	
60-64	614	556	2	3		568	546	3	2		467	833	6	11	
65-69	427	421	0	1		366	670	3	2		383	640	12	11	
70-74	259	286	0	1		307	334	3	2		321	439	1	5	
75-79#	155	178	1	2		268	298	1	2		321	439	1	0	
80-84#	0	0	0	0		268	298	0	1		156	243	1	0	
85-89	17	22	1	0		27	44	1	0		91	126	0	1	
TOTALS	13473	13819	148	170		14020	14909	139	185		14415	15853	204	250	
GRAND TOTAL				27550					29253					30722	

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 402.0	794.0	983.0
	EXPECTED* 391.3	781.4	1070.4
	OBS/EXP	1.027	0.918
CV-RENAL	OBSERVED 221.0	463.0	570.0
	EXPECTED* 199.8	422.1	625.6
	OBS/EXP	1.106	0.911
HEART	OBSERVED 162.0	376.0	456.0
	EXPECTED* 148.0	309.1	444.9
	OBS/EXP	1.094	1.025
NON CV-R	OBSERVED 181.0	331.0	413.0
	EXPECTED* 191.5	359.3	444.8
	OBS/EXP	0.945	0.929
CANCER	OBSERVED 79.0	161.0	204.0
	EXPECTED* 69.5	135.1	175.6
	OBS/EXP	1.137	1.162

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS					CODE				
	1949	1950	1959	1960	1961	1969	1970	1971	SUM	69-71	STATE	NEW JERSEY	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1950 POP/SQ. MILE
TOTAL	192	210	402	259	248	350	300	333	794	983	447	447	1253	1253	1253
CV-RENAL	105	116	221	143	149	190	184	196	570	570	1970	1970	1970	1970	1970
HEART	162	74	88	122	118	136	136	137	456	456	1949	1949	1949	1949	1949
NON CV-R	87	94	181	116	99	160	116	137	413	413	1969	1969	1969	1969	1969
CANCER	34	45	79	54	43	85	49	70	204	204	URBAN CLASS	URBAN CLASS	URBAN CLASS	URBAN CLASS	URBAN CLASS
											1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK
											JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE
											SEPT MEAN TEMPERATURE	SEPT MEAN TEMPERATURE	SEPT MEAN TEMPERATURE	SEPT MEAN TEMPERATURE	SEPT MEAN TEMPERATURE
											ANNUAL PRECIPITATION	ANNUAL PRECIPITATION	ANNUAL PRECIPITATION	ANNUAL PRECIPITATION	ANNUAL PRECIPITATION
											WATER RESERVE REGION	WATER RESERVE REGION	WATER RESERVE REGION	WATER RESERVE REGION	WATER RESERVE REGION
											TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS	TOTAL HARDNESS
											NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS
											FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATION STATUS
											GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE
											206 ppm	206 ppm	206 ppm	206 ppm	206 ppm
											NO ARTIFICIAL	NO ARTIFICIAL	NO ARTIFICIAL	NO ARTIFICIAL	NO ARTIFICIAL
											LOW NATURAL	LOW NATURAL	LOW NATURAL	LOW NATURAL	LOW NATURAL

CAUSE	1949-50	1959-61	1969-71
1. <i>Chlamydia trachomatis</i>	100	100	100
2. <i>Neisseria gonorrhoeae</i>	100	100	100
3. <i>Haemophilus ducreyi</i>	100	100	100
4. <i>Herpes simplex virus</i>	100	100	100
5. <i>Mycoplasma genitalium</i>	100	100	100
6. <i>Ureaplasma urealyticum</i>	100	100	100
7. <i>Trichomonas vaginalis</i>	100	100	100
8. <i>Candida albicans</i>	100	100	100
9. <i>Streptococcus pyogenes</i>	100	100	100
10. <i>Staphylococcus aureus</i>	100	100	100
11. <i>Pseudomonas aeruginosa</i>	100	100	100
12. <i>Escherichia coli</i>	100	100	100
13. <i>Klebsiella pneumoniae</i>	100	100	100
14. <i>Enterobacteriaceae</i>	100	100	100
15. <i>Acinetobacter baumannii</i>	100	100	100
16. <i>Mycobacterium tuberculosis</i>	100	100	100
17. <i>Mycobacterium avium</i>	100	100	100
18. <i>Mycobacterium fortuitum</i>	100	100	100
19. <i>Mycobacterium goodii</i>	100	100	100
20. <i>Mycobacterium neoaurum</i>	100	100	100
21. <i>Mycobacterium thermophilus</i>	100	100	100
22. <i>Mycobacterium abscessus</i>	100	100	100
23. <i>Mycobacterium chelonae</i>	100	100	100
24. <i>Mycobacterium cosmeticus</i>	100	100	100
25. <i>Mycobacterium fortuitum</i>	100	100	100
26. <i>Mycobacterium goodii</i>	100	100	100
27. <i>Mycobacterium neoaurum</i>	100	100	100
28. <i>Mycobacterium thermophilus</i>	100	100	100
29. <i>Mycobacterium abscessus</i>	100	100	100
30. <i>Mycobacterium chelonae</i>	100	100	100
31. <i>Mycobacterium cosmeticus</i>	100	100	100
32. <i>Mycobacterium fortuitum</i>	100	100	100
33. <i>Mycobacterium goodii</i>	100	100	100
34. <i>Mycobacterium neoaurum</i>	100	100	100
35. <i>Mycobacterium thermophilus</i>	100	100	100
36. <i>Mycobacterium abscessus</i>	100	100	100
37. <i>Mycobacterium chelonae</i>	100	100	100
38. <i>Mycobacterium cosmeticus</i>	100	100	100
39. <i>Mycobacterium fortuitum</i>	100	100	100
40. <i>Mycobacterium goodii</i>	100	100	100
41. <i>Mycobacterium neoaurum</i>	100	100	100
42. <i>Mycobacterium thermophilus</i>	100	100	100
43. <i>Mycobacterium abscessus</i>	100	100	100
44. <i>Mycobacterium chelonae</i>	100	100	100
45. <i>Mycobacterium cosmeticus</i>	100	100	100
46. <i>Mycobacterium fortuitum</i>	100	100	100
47. <i>Mycobacterium goodii</i>	100	100	100
48. <i>Mycobacterium neoaurum</i>	100	100	100
49. <i>Mycobacterium thermophilus</i>	100	100	100
50. <i>Mycobacterium abscessus</i>	100	100	100
51. <i>Mycobacterium chelonae</i>	100	100	100
52. <i>Mycobacterium cosmeticus</i>	100	100	100
53. <i>Mycobacterium fortuitum</i>	100	100	100
54. <i>Mycobacterium goodii</i>	100	100	100
55. <i>Mycobacterium neoaurum</i>	100	100	100
56. <i>Mycobacterium thermophilus</i>	100	100	100
57. <i>Mycobacterium abscessus</i>	100	100	100
58. <i>Mycobacterium chelonae</i>	100	100	100
59. <i>Mycobacterium cosmeticus</i>	100	100	100
60. <i>Mycobacterium fortuitum</i>	100	100	100
61. <i>Mycobacterium goodii</i>	100	100	100
62. <i>Mycobacterium neoaurum</i>	100	100	100
63. <i>Mycobacterium thermophilus</i>	100	100	100
64. <i>Mycobacterium abscessus</i>	100	100	100
65. <i>Mycobacterium chelonae</i>	100	100	100
66. <i>Mycobacterium cosmeticus</i>	100	100	100
67. <i>Mycobacterium fortuitum</i>	100	100	100
68. <i>Mycobacterium goodii</i>	100	100	100
69. <i>Mycobacterium neoaurum</i>	100	100	100
70. <i>Mycobacterium thermophilus</i>	100	100	100
71. <i>Mycobacterium abscessus</i>	100	100	100
72. <i>Mycobacterium chelonae</i>	100	100	100
73. <i>Mycobacterium cosmeticus</i>	100	100	100
74. <i>Mycobacterium fortuitum</i>	100	100	100

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					69-71 SUM	CITY CHARACTERISTICS	CODE
	1949	1950	49-50 SUM	1959	1960			
TOTAL	272	308	580	371	323	1053	STATE	NEW J
CV-RENAL	139	181	320	188	179	562	1950 RANK BY POPULATION	418
HEART	97	133	230	150	138	434	1950 POP./SQ. MILE	435
NON CV-R	133	127	260	183	144	468	1970 POP./SQ. MILE	7805
CANCER	55	50	105	88	61	219	1949 MED. F.A.H. INCOME	3845
							1969 MED. F.A.H. INCOME	11290
							URBAN CLASS	FRING
							1950 URBAN AREA RANK	1
							JAN MEAN TEMPERATURE	30
							JULY MEAN TEMPERATURE	74
							MEAN ANN. PRECIPITATION	48
							LAND RESOURCE REGION	R
							WATER SOURCE	SURFACE
							TOTAL HAPINESS	69 F
							NON-CARBONATE HARDNESS	38 P
							FLUORIDATION STATUS	NO AR

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	WM	WF	NM	NF	WM	WF	NM	NF	WM	NF
TOTAL	25880	24285	23671	23110	824	836	21459	21130	1470	45380		
49-50			280			231						
SUN						50676						

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	1959	1960	1961	SUN	1969	1970	1971	SUN		
TOTAL	624	626	581	595	598	1774	533	536	499	1568		
CV-RENAL	365	352	327	355	361	1043	305	316	286	907		
HEART	296	292	275	302	318	895	260	255	230	745		
NON CV-R	259	274	254	240	231	731	228	220	213	661		
CANCER	100	107	110	85	90	285	83	93	86	262		

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*
CV-RENAL									
OBSERVED	717.0			1043.0			907.0		
EXPECTED*	456.8			721.1			708.5		
OBS/EXP	1.570			1.446			1.280		
HEART									
OBSERVED	588.0			895.0			745.0		
EXPECTED*	335.3			525.4			504.8		
OBS/EXP	1.749			1.703			1.476		
NON CV-R									
OBSERVED	533.0			731.0			661.0		
EXPECTED*	389.1			603.6			567.7		
OBS/EXP	1.370			1.211			1.164		
CANCER									
OBSERVED	207.0			285.0			262.0		
EXPECTED*	147.2			224.5			204.8		
OBS/EXP	1.406			1.270			1.279		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	NEW JERSEY
1950 RANK BY POPULATION	229
1950 POP/SQ. MILE	50676
1970 POP/SQ. MILE	32414
1949 MED. FAM. INCOME	3125
1969 MED. FAM. INCOME	7786
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	1
JAN MEAN TEMPERATURE	32
JULY MEAN TEMPERATURE	75
MEAN ANNUAL PRECIPITATION	74
WATER SOURCE	WATER SUPPLY REGION
TOTAL HARDNESS	36 PPM
NON-CARBONATE HARDNESS	19 PPM
FLORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	479	483	1	0	516	454	1	2
1-4	2112	1946	3	0	1705	1728	4	5
5-9	1952	1931	3	0	1897	1778	7	8
10-14	1420	1346	8	2	2012	2022	5	4
15-19	1465	1598	5	9	1640	1810	7	2
20-24	1833	2006	4	9	1462	1755	5	6
25-29	2333	2606	6	4	1820	1725	7	8
30-34	2862	2763	2	4	1834	1860	7	6
35-39	2809	2660	5	7	1993	2160	3	4
40-44	2377	2454	5	8	1771	2443	7	5
45-49	2167	2167	5	3	2183	2506	5	7
50-54	2085	2234	4	3	2033	2329	2	4
55-59	1890	1955	2	4	2047	2206	3	4
60-64	1530	1598	4	2	1771	2107	1	3
65-69	1064	1477	1	1	1471	1762	2	1
70-74	599	734	0	1	1411	1752	1	2
75-79	514	658	0	1	500	752	0	1
80-84	0	0	0	0	222	327	0	0
85-UP	66	120	0	0	95	161	0	0
TOTALS	28757	30316	63	65	28089	31148	66	76
GRAND TOTAL				59201				59379

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL				TOTAL				TOTAL			
CV-RENAL	OBSERVED	1089.0	2073.0	2637.0	OBSERVED	1089.0	2073.0	2637.0	OBSERVED	1089.0	2073.0	2637.0
	EXPECTED*	1059.1	2015.1	2753.6	EXPECTED*	1059.1	2015.1	2753.6	EXPECTED*	1059.1	2015.1	2753.6
	OBS/EXP	1.028	1.029	0.958	OBS/EXP	1.028	1.029	0.958	OBS/EXP	1.028	1.029	0.958
HEART	OBSERVED	619.0	1241.0	1590.0	OBSERVED	619.0	1241.0	1590.0	OBSERVED	619.0	1241.0	1590.0
	EXPECTED*	577.2	1146.3	1676.5	EXPECTED*	577.2	1146.3	1676.5	EXPECTED*	577.2	1146.3	1676.5
	OBS/EXP	1.072	1.083	0.947	OBS/EXP	1.072	1.083	0.947	OBS/EXP	1.072	1.083	0.947
NON CV-R	OBSERVED	483.0	989.0	1296.0	OBSERVED	483.0	989.0	1296.0	OBSERVED	483.0	989.0	1296.0
	EXPECTED*	422.0	833.2	1186.3	EXPECTED*	422.0	833.2	1186.3	EXPECTED*	422.0	833.2	1186.3
	OBS/EXP	1.145	1.187	1.092	OBS/EXP	1.145	1.187	1.092	OBS/EXP	1.145	1.187	1.092
CANCER	OBSERVED	470.0	832.0	1047.0	OBSERVED	470.0	832.0	1047.0	OBSERVED	470.0	832.0	1047.0
	EXPECTED*	481.9	868.8	1075.1	EXPECTED*	481.9	868.8	1075.1	EXPECTED*	481.9	868.8	1075.1
	OBS/EXP	0.975	0.958	0.974	OBS/EXP	0.975	0.958	0.974	OBS/EXP	0.975	0.958	0.974

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM	49-50	1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	548	541	1089	1089	671	710	692	2073	894	856	887	2637
CV-RENAL	323	296	619	619	401	415	425	1241	539	501	550	1590
HEART	259	224	483	483	320	336	333	989	438	420	438	1296
NON CV-R	225	245	470	470	270	295	267	832	355	355	337	1047
CANCER	97	116	213	213	130	166	121	417	159	183	167	509

CITY CHARACTERISTICS

STATE	NEW JERSEY	
	1970	1969
1950 RANK BY POPULATION	197	19097
1950 POP/SQ. MILE	20601	20601
1949 POP/SQ. MILE	4116	4116
1949 MED. FAM. INCOME	10258	10258
1969 MED. FAM. INCOME	FRINGE	FRINGE
URBAN CLASS	1	1
1950 URBAN AREA RANK	31	31
JAN MEAN TEMPERATURE	75	75
JULY MEAN TEMPERATURE	42	42
MEAN ANN. PRECIPITATION	R	R
LAND RESOURCE REGION	GROUND AND SURFACE	GROUND AND SURFACE
WATER SOURCE	115 PPM	115 PPM
TOTAL HARDNESS	44 PPM	44 PPM
NON-CARBONATE HARDNESS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL
FLUORIDATION STATUS		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	2262	2182	240	280	2329	2154	616	634	1509	1443	715	717
1-4	10303	10104	975	1005	8823	8427	2364	2370	5928	5491	2807	2897
5-9	10424	10008	982	1035	9690	9143	2210	2321	7859	7427	3802	3636
10-14	8029	8236	818	866	9382	9351	1647	1772	8311	7982	3431	3426
15-19	8496	8903	878	811	7704	8092	1212	1414	8015	8205	2528	3406
20-24	10176	10943	897	1104	6461	7158	1259	1774	7619	8649	1979	3019
25-29	11661	12567	980	1189	7184	7005	1376	1668	6481	6210	2054	2647
30-34	11461	12399	837	1023	7683	7705	1323	1630	4834	5004	1745	2259
35-39	10961	11647	848	921	8034	8706	1278	1429	4915	4912	1505	1919
40-44	10062	10329	724	757	8086	9208	964	1110	5716	6209	1418	1695
45-49	9059	9221	612	626	8302	9112	880	955	6341	7245	1120	1405
50-54	8967	9511	504	493	7512	7974	637	740	6579	7869	971	1144
55-59	7811	8012	328	286	7117	7308	688	658	6226	7327	772	947
60-64	6503	6323	233	228	6161	7007	419	471	5487	6351	535	721
65-69	4367	4377	165	169	5041	5873	279	350	4051	5266	486	569
70-74	2771	3139	115	135	3494	4105	193	208	3026	4650	296	407
75-79*	2154	2986	73	94	1876	2523	92	125	1938	3151	135	212
80-84*	0	0	0	0	833	1232	45	59	1010	1812	70	135
85-89*	301	456	10	25	366	706	27	37	637	1128	70	92
TOTALS	136108	141943	10019	10907	116038	122789	17549	19725	96482	106331	26479	31253
GRAND TOTAL				239017				276101				260545

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	6693.0	10311.0	10053.0
EXPECTED*	4914.2	8246.3	8844.8
OBS/EXP	1.362	1.250	1.137
CV-RENAL			
OBSERVED	3538.0	5598.0	5580.0
EXPECTED*	2607.5	4474.9	5028.0
OBS/EXP	1.357	1.251	1.110
HEART			
OBSERVED	2652.0	4421.0	4522.0
EXPECTED*	1889.9	3207.3	3515.3
OBS/EXP	1.403	1.378	1.286
NON CV-R			
OBSERVED	3155.0	4713.0	4473.0
EXPECTED*	2306.7	3773.4	3816.8
OBS/EXP	1.368	1.249	1.172
CANCER			
OBSERVED	1215.0	1834.0	1510.0
EXPECTED*	834.8	1355.9	1373.8
OBS/EXP	1.455	1.353	1.172

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	
TOTAL	3385	3308	6693	10311	3448	3373	3232	10053	NEW JERSEY
CV-RENAL	1780	1758	3538	5598	3488	3373	3232	10053	1950 RANK BY POPULATION 37
HEART	1336	1316	2652	4421	1925	1855	1800	5580	1950 POP/SQ. MILE 23001
NON CV-R	1605	1550	3155	4713	1556	1486	1480	4522	1970 POP/SQ. MILE 17255
CANCER	605	610	1215	1834	492	584	534	1610	1949 MED. FAM. INCOME 3424
									1969 MED. FAM. INCOME 9310
									URBAN CLASS CENTRAL
									1950 URBAN AREA RANK 1
									JAN MEAN TEMPERATURE 32
									JULY MEAN TEMPERATURE 75
									MEAN ANN. PRECIPITATION 44
									LAND RESOURCE REGION R
									WATER SOURCE SURFACE
									TOTAL HARDNESS 36 PPM
									NON-CARBONATE HARDNESS 19 PPM
									FLUORIDATION STATUS NC ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
1-4	358	318	3	1	344	326	2	4	284	253	3	1
5-9	1522	1426	9	9	1289	1272	12	14	1164	1040	4	9
10-14	1563	1511	10	8	1500	1543	14	14	1582	1498	11	12
15-19	1246	1116	8	8	1649	1468	15	13	1588	1467	10	13
20-24	1146	1204	7	9	1277	1256	16	6	1417	1493	17	13
25-29	1315	1529	4	14	1375	1051	5	9	1269	1486	12	15
30-34	1567	1725	11	11	1078	1079	7	10	1188	1238	12	15
35-39	1602	1771	8	10	1172	1211	11	11	992	964	5	6
40-44	1486	1547	10	6	1192	1390	12	15	924	969	5	13
45-49	1363	1443	6	4	1283	1459	4	6	1087	1192	14	13
50-54	1328	1433	4	10	1297	1391	7	8	1204	1394	11	9
55-59	1387	1425	7	3	1178	1257	10	7	1233	1491	5	10
60-64	1152	1275	4	4	1055	1165	5	8	1199	1299	5	10
65-69	916	996	5	1	1023	1096	8	6	921	1104	9	7
70-74	632	680	1	3	741	919	4	2	673	908	7	7
75-79*	383	502	1	4	473	717	3	2	509	761	7	8
80-84*	300	465	3	2	260	365	0	2	316	524	4	0
85-UP	0	0	0	0	123	214	0	0	152	306	0	1
TOTALS	19311	20434	101	106	17923	19275	136	138	17727	19557	141	160
GRAND TOTAL			39952	37472							37585	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	743.0	674.1	1.102		1277.0	1116.8	1.143		1321.0	1254.2	1.053	
CV-RENAL	407.0	363.9	1.118		760.0	623.8	1.218		784.0	731.2	1.072	
HEART	331.0	265.3	1.248		618.0	452.3	1.366		637.0	521.0	1.223	
NON CV-R	336.0	310.2	1.083		517.0	492.9	1.049		537.0	522.9	1.027	
CANCER	146.0	117.0	1.248		244.0	192.3	1.269		273.0	208.1	1.312	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949				1950				1959-61				1969-71			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	376	367	743	407	430	406	441	1277	433	438	450	1321	433	438	450	1321
CV-RENAL	207	200	407	331	263	231	266	760	257	270	253	764	257	270	253	764
HEART	164	167	336	167	219	172	227	618	212	234	191	637	212	234	191	637
NON CV-R	169	167	336	167	167	175	175	517	176	164	197	537	176	164	197	537
CANCER	78	68	146	82	82	77	85	244	84	91	98	273	84	91	98	273

OBSERVED DEATHS
BY CAUSE AND YEAR

CITY CHARACTERISTICS

CODE

STATE	NEW JERSEY
1950 BANK BY POPULATION	299
1950 POP/SQ. MILE	4489
1970 POP/SQ. MILE	4085
1949 MED. FAM. INCOME	3837
1969 MED. FAM. INCOME	11091
URBAN CLASS	PRINGE
1950 URBAN AREA RANK	1
JAN MEAN TEMPERATURE	31
JULY MEAN TEMPERATURE	75
MEAN ANNUAL PRECIPITATION	42
LAND RESOURCE REGION	R
WATER SOURCE	
TOTAL HARDNESS	25 PPM
NON-CARBONATE HARDNESS	14 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

1950

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	277	249	13	18	381	343	27	39
1-4	1333	1257	64	57	1482	1406	152	170
5-9	1329	1270	57	38	1774	1597	154	178
10-14	927	839	69	43	1295	1223	104	138
15-19	810	671	37	52	1205	1323	84	82
20-24	934	1065	47	61	895	1045	76	94
25-29	314	405	36	61	961	972	86	97
30-34	1062	1585	11	40	1133	1261	110	131
35-39	1502	1393	45	41	1482	1662	113	129
40-44	1210	1078	39	29	1659	1829	100	81
45-49	929	783	33	31	1584	1588	84	83
50-54	811	740	27	29	1278	1075	51	35
55-59	745	713	24	14	952	808	44	40
60-64	553	469	12	9	657	734	18	20
65-69	366	349	11	9	556	665	15	23
70-74	169	180	2	3	349	408	9	17
75-79*	127	130	1	3	212	238	6	1
80-84*	0	0	0	0	73	88	1	4
85-UP	18	23	0	1	26	43	1	1
TOTALS	14974	14575	563	532	18529	18766	1273	1363
GRAND TOTAL				30644				39931

1970

AGE GROUP	1970				1970			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	281	228	52	57	242	228	52	57
1-4	1482	1406	260	230	1975	1879	260	230
5-9	1774	1597	352	353	1350	1283	352	353
10-14	927	839	327	308	1581	1482	327	308
15-19	810	671	232	223	1533	1439	232	223
20-24	934	1065	166	226	1303	1486	166	226
25-29	314	405	188	253	1162	1105	188	253
30-34	1062	1585	212	242	796	797	212	242
35-39	1482	1662	189	192	816	852	189	192
40-44	1210	1078	170	195	1035	1189	170	195
45-49	929	783	164	171	1276	1579	164	171
50-54	811	740	121	115	1567	1687	121	115
55-59	745	713	92	83	1416	1449	92	83
60-64	553	469	55	53	1022	961	55	53
65-69	366	349	44	48	624	673	44	48
70-74	169	180	12	15	388	584	12	15
75-79*	127	130	6	10	276	425	6	10
80-84*	0	0	4	13	131	194	4	13
85-UP	18	23	5	3	65	118	5	3
TOTALS			2651	2790	17538	18430	2651	2790
GRAND TOTAL				41409				41409

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

1949-50 1959-61 1969-71

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	397.0	372.1	1.067	950.0	893.2	1.064	1183.0	1220.5	0.969
CV-RENAL									
OBSERVED	196.0			538.0			637.0		
EXPECTED*	179.7			454.9			674.8		
OBS/EXP	1.091			1.183			0.944		
HEART									
OBSERVED	143.0			409.0			478.0		
EXPECTED*	133.6			334.1			484.5		
OBS/EXP	1.071			1.224			0.987		
NON CV-R									
OBSERVED	201.0			412.0			546.0		
EXPECTED*	192.4			438.4			545.7		
OBS/EXP	1.045			0.940			1.001		
CANCER									
OBSERVED	87.0			189.0			262.0		
EXPECTED*	64.6			154.3			205.8		
OBS/EXP	1.347			1.225			1.273		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE NEW JERSEY

1950 RANK BY POPULATION 389

1950 POP/SQ. MILE 2761

1970 POP/SQ. MILE 3764

1949 MED. FAM. INCOME 4176

1969 MED. FAM. INCOME 11368

URBAN CLASS FRINGE

1950 URBAN AREA RANK 1

JAN MEAN TEMPERATURE 30

JULY MEAN TEMPERATURE 75

MEAN ANN. PRECIPITATION 47

LAND RESOURCE REGION R

WATER SOURCE

TOTAL HARDNESS 151 PPM

NON-CARBONATE HARDNESS 47 PPM

FLOORINATION STATUS NO ARTIFICIAL-LOW NATURAL

GROUND AND SURFACE

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	NF
LT 1	2898	2702	879	912	2545	2385	2245	2134	1473	1375	2780	2866	1473	1375	2780	2866	1473	1375
1-4	13324	12433	3193	3221	9400	8890	8222	8204	5407	5095	11193	11056	5407	5095	11193	11056	5407	5095
5-9	13286	12710	3026	3116	10020	9680	8079	8278	6809	6423	14146	14146	6809	6423	14146	14146	6809	6423
10-14	10295	10159	2702	2745	10065	9631	5876	6163	6745	6382	13115	12807	6745	6382	13115	12807	6745	6382
15-19	10904	11309	2384	2742	9280	8820	3993	4766	6324	5487	10341	10341	6324	5487	10341	10341	6324	5487
20-24	13230	14662	2860	3847	9297	8165	3658	5345	5524	4388	7265	7265	5524	4388	7265	7265	5524	4388
25-29	15432	17038	3670	3684	9052	8165	5958	6345	5524	4388	7265	7265	5524	4388	7265	7265	5524	4388
30-34	18746	16202	3235	3772	9052	8165	5958	6345	5524	4388	7265	7265	5524	4388	7265	7265	5524	4388
35-39	14746	15242	3235	3772	9052	8165	5958	6345	5524	4388	7265	7265	5524	4388	7265	7265	5524	4388
40-44	13277	13493	2933	2986	8750	9007	5391	5927	4466	4466	5927	6483	4466	4466	5927	6483	4466	4466
45-49	12108	11954	2582	2471	9230	9013	3470	3711	5183	5623	4612	5533	5183	5623	4612	5533	5183	5623
50-54	12004	11772	1925	1848	8447	8039	2789	2684	5051	5712	3620	3368	5051	5712	3620	3368	5051	5712
55-59	10073	10191	1302	1125	8112	8070	2407	2527	5021	5696	2739	3368	5021	5696	2739	3368	5021	5696
60-64	8989	8311	831	762	7139	7564	1146	1746	4326	4982	2176	2625	4326	4982	2176	2625	4326	4982
65-69	6386	6643	593	636	5952	6798	1146	1204	3305	4208	1600	2071	3305	4208	1600	2071	3305	4208
70-74	3778	4225	317	319	4435	4882	666	777	2549	3524	950	1375	2549	3524	950	1375	2549	3524
75-79#	2981	3777	219	286	2436	2861	368	447	1754	2596	584	663	1754	2596	584	663	1754	2596
80-84#	0	0	0	0	1064	1481	161	210	1041	1505	214	426	1041	1505	214	426	1041	1505
85-UP	403	646	37	64	486	911	82	134	618	936	244	305	618	936	244	305	618	936
TOTALS	179208	183941	36259	39368	130258	135631	66251	73080	81575	86807	99487	114548	81575	86807	99487	114548	81575	86807
GRAND TOTAL				438776				405220				382417						

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	9994.0	15419.0	12933.0
OBSERVED	9994.0	15419.0	12933.0
EXPECTED*	7369.7	12187.4	11345.4
OBS/EXP	1.356	1.265	1.140
CV-RENAL	5361.0	8346.0	6512.0
OBSERVED	5361.0	8346.0	6512.0
EXPECTED*	3834.9	6338.3	5852.5
OBS/EXP	1.398	1.317	1.113
HEART	4046.0	6678.0	5284.0
OBSERVED	4046.0	6678.0	5284.0
EXPECTED*	2753.0	4448.6	3967.1
OBS/EXP	1.470	1.501	1.332
MON CV-R	4633.0	7073.0	6421.0
OBSERVED	4633.0	7073.0	6421.0
EXPECTED*	3534.9	5849.1	5492.9
OBS/EXP	1.311	1.209	1.169
CANCER	1646.0	2458.0	1911.0
OBSERVED	1646.0	2458.0	1911.0
EXPECTED*	1214.9	1871.3	1585.9
OBS/EXP	1.355	1.314	1.205

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	CITY CHARACTERISTICS						CODE
	STATE	1950 RANK BY POPULATION	NEW JERSEY	1950 POE/SQ. MILE	1950 POE/1000	1950 POE/1000	
TOTAL	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
CV-RENAL	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
HEART	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
MON CV-R	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
CANCER	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
URBAN CLASS	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
1950 URBAN AREA RANK	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
JAN MEAN TEMPERATURE	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
JULY MEAN TEMPERATURE	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
MEAN ANNUAL PRECIPITATION	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
WATER RESOURCES REGION	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
WATER RESOURCES	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
TOTAL DEATHS	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
NON-CARCINOMA DEATHS	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
FLUORIDATION STATUS	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	
NO ARTIFICIAL LOW NATURAL	NEW JERSEY	21	18592	1970 POE/1000	1970 POE/1000	1970 POE/1000	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	260	230	59	64	309	301	113	101	197	206	142	129
5-9	1195	1174	203	204	1049	1046	384	397	763	679	549	535
10-14	1065	1078	165	172	1131	1121	397	375	817	817	636	587
15-19	772	776	135	141	969	1039	231	306	832	750	512	543
20-24	1364	1425	141	141	2119	1858	202	227	3005	1820	532	563
25-29	2264	1969	176	221	1843	1484	232	262	3102	2444	463	654
30-34	1618	1565	232	258	1218	999	264	281	1183	1048	416	456
35-39	1550	1559	212	168	1055	1008	238	284	573	573	286	340
40-44	1320	1388	161	169	1095	1095	238	228	600	548	229	282
45-49	1052	1044	128	130	1070	1137	215	188	691	728	212	307
50-54	859	935	104	105	1058	1100	175	158	810	842	217	246
55-59	976	1128	91	97	873	927	107	120	843	906	187	169
60-64	907	973	57	55	733	821	96	89	825	906	165	167
65-69	861	906	45	33	697	858	67	73	648	769	83	123
70-74	577	622	39	44	681	829	49	54	470	647	51	84
75-79	327	394	14	25	535	656	26	35	389	657	43	81
80-84	271	386	16	12	292	364	17	12	265	498	28	37
85-89	0	0	0	0	112	164	6	4	159	333	16	18
90-94	45	68	0	7	44	115	6	4	85	166	14	11
TOTALS	17193	17590	1982	2046	16888	16922	3123	3206	16374	15418	4761	5332
GRAND TOTAL				38811				40139				41885

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	802.0	1258.0	1.011		1156.0	1156.0	1.000		1304.0	1304.0	1.000	
CV-RENAL	438.0	670.0	0.651		623.5	723.2	0.862		651.0	723.2	0.899	
HEART	325.0	492.0	0.660		443.1	500.1	0.886		495.0	500.1	0.990	
NON CV-R	364.0	588.0	0.619		539.5	623.2	0.866		656.6	623.2	1.054	
CANCER	154.0	240.0	0.642		183.4	190.4	0.963		231.0	190.4	1.213	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	1950 RANK BY POPULATION	NEW JERSEY
TOTAL	412	390	802	388	451	419	1258	437	451	416	1304	1950 POP./SQ. MILE	7057	307
CV-RENAL	228	210	438	208	237	225	670	206	246	201	651	1970 POP./SQ. MILE	7479	7479
HEART	168	157	325	155	165	172	492	153	187	155	495	1949 MED. PAM. INCOME	3536	3536
NON CV-R	184	180	364	180	214	194	568	231	207	215	653	1969 MED. PAM. INCOME	9589	9589
CANCER	76	78	154	82	85	73	240	81	73	77	231	URBAN CLASS.	PRINCE	1
												1950 URBAN AREA RANK	30	1
												JAN MEAN TEMPERATURE	72	30
												JULY MEAN TEMPERATURE	72	72
												MEAN ANN. PRECIPITATION	46	46
												LAND RESOURCE REGION	S	S
												WATER SOURCE	SUPPAC	SUPPAC
												TOTAL HARDNESS	44 PPM	44 PPM
												NON-CARBONATE HARDNESS	29 PPM	29 PPM
												FLUORIDATION STATUS	NO ARTIFICIAL	NO ARTIFICIAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	236	207	6	4	209	200	4	5	216	195	11	2
5-9	1021	1050	17	18	1053	1041	18	21	925	829	24	21
10-14	876	1130	19	23	1336	1372	23	19	1312	1248	31	35
15-19	805	847	18	20	1314	1287	23	26	1006	1406	25	32
20-24	778	805	19	25	968	1050	16	23	1330	1370	20	18
25-29	725	887	11	17	590	717	8	9	938	1184	22	28
30-34	925	1129	15	20	713	728	12	20	964	1028	12	26
35-39	1091	1195	13	21	872	930	14	17	790	796	35	27
40-44	1022	1072	16	20	1030	1270	13	21	841	867	24	29
45-49	919	958	20	16	1121	1211	16	19	987	1060	24	17
50-54	898	913	11	16	1097	1211	22	16	1066	1322	11	26
55-59	668	693	10	11	982	1043	14	18	1084	1171	21	22
60-64	502	499	4	8	811	857	17	8	1027	1056	12	17
65-69	365	404	6	10	690	734	9	16	770	881	16	20
70-74	189	298	5	3	460	586	11	4	512	677	9	6
75-79*	212	301	4	6	300	415	4	4	382	476	9	3
80-84*	0	0	0	0	171	263	0	3	219	385	1	4
85-UP	28	51	0	1	69	148	3	4	131	234	32	12
TOTALS	12867	13668	204	253	13872	15160	226	255	14969	16411	368	351
GRAND TOTAL				26992				29513				32099

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959-61				1969-71			
	1949	1950	49-50	50H	1959	1960	1961	59-61	1969	1970	1971	50H
TOTAL	217	220	437		263	261	294	818	239	304	262	805
CV-RENAL	123	132	255		158	159	178	495	137	181	166	486
HEART	89	94	183		121	118	119	378	109	167	129	385
NON CV-R	94	88	182		105	102	116	323	102	123	96	321
CANCER	45	38	83		55	49	57	161	56	69	46	171

CITY CHARACTERISTICS

CODE

STATE	NEW JERSEY
1950 RANK BY POPULATION	453
1950 POP/SQ. MILE	7939
1970 POP/SQ. MILE	9441
1949 MED. FAM. INCOME	4577
1969 MED. FAM. INCOME	12710
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	1
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	39
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	45 PPM
NON-CARBONATE HARDNESS	22 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

1949-50 1959-61 1969-71

CAUSE

TOTAL

OBSERVED	437.0	818.0	805.0
EXPECTED*	428.4	783.7	1034.5
OBS/EXP	1.020	1.044	0.778

CV-RENAL

OBSERVED	255.0	495.0	484.0
EXPECTED*	228.8	428.4	601.0
OBS/EXP	1.115	1.155	0.805

HEART

OBSERVED	183.0	378.0	385.0
EXPECTED*	165.6	311.2	426.3
OBS/EXP	1.105	1.215	0.903

NON CV-R

OBSERVED	182.0	323.0	321.0
EXPECTED*	199.6	355.2	433.5
OBS/EXP	0.912	0.909	0.740

CANCER

OBSERVED	83.0	161.0	171.0
EXPECTED*	72.3	136.1	163.3
OBS/EXP	1.148	1.183	1.010

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	288	270	65	68	293	294	107	100	157	174	126	123
1-4	1162	1191	255	258	1038	997	435	409	556	497	503	493
5-9	1110	1108	244	255	952	989	467	448	606	556	655	623
10-14	896	792	214	270	961	879	331	360	623	607	655	589
15-19	855	1006	249	245	690	855	249	299	569	685	482	512
20-24	995	1288	259	321	744	1015	208	284	838	1123	401	556
25-29	1356	1484	308	356	940	936	236	317	872	826	458	528
30-34	1295	1477	225	302	933	912	313	374	597	504	394	483
35-39	1157	1329	274	340	820	927	293	342	462	484	305	403
40-44	1097	1191	250	280	816	1023	239	312	490	516	330	414
45-49	967	1082	221	278	832	1033	242	263	459	655	285	313
50-54	911	1045	192	211	896	1036	184	249	577	802	269	310
55-59	810	843	149	164	810	916	197	232	605	870	178	271
60-64	667	790	65	112	659	834	117	159	675	842	170	241
65-69	494	640	55	100	535	597	118	122	635	742	146	185
70-74	340	421	52	78	438	517	64	86	383	526	86	119
75-79*	245	471	37	68	232	372	42	46	333	375	58	73
80-84*	0	0	0	0	237	322	19	27	106	231	27	34
85-UP	42	120	9	13	65	117	18	28	72	137	22	26
TOTALS	14687	16548	3143	3659	12833	14619	3870	4467	9405	11226	5565	6370
GRAND TOTAL				38037				35789				32566

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	784.0	1343.0	1288.0		784.0	1343.0	1288.0		784.0	1343.0	1288.0	
CV-RENAL	448.0	760.0	700.0		448.0	760.0	700.0		448.0	760.0	700.0	
HEART	386.4	671.8	701.0		386.4	671.8	701.0		386.4	671.8	701.0	
	1.159	1.131	0.599		1.159	1.131	0.599		1.159	1.131	0.599	
	342.0	588.0	558.0		342.0	588.0	558.0		342.0	588.0	558.0	
	270.8	469.1	482.0		270.8	469.1	482.0		270.8	469.1	482.0	
	1.263	1.253	1.158		1.263	1.253	1.158		1.263	1.253	1.158	
NON CV-R	336.0	583.0	588.0		336.0	583.0	588.0		336.0	583.0	588.0	
	326.3	544.0	536.3		326.3	544.0	536.3		326.3	544.0	536.3	
	1.030	1.072	1.096		1.030	1.072	1.096		1.030	1.072	1.096	
CANCER	130.0	228.0	249.0		130.0	228.0	249.0		130.0	228.0	249.0	
	112.7	190.2	188.4		112.7	190.2	188.4		112.7	190.2	188.4	
	1.154	1.198	1.321		1.154	1.198	1.321		1.154	1.198	1.321	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949				1959				1969				1970				1971				69-71			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	SUM	SUM	SUM	SUM
TOTAL	405	379	784	784	437	455	1343	1343	423	402	463	463	423	402	463	463	423	402	463	463	1288	1288	1288	1288
CV-RENAL	227	221	448	448	239	250	271	271	231	220	249	249	231	220	249	249	231	220	249	249	700	700	700	700
HEART	174	168	342	342	178	203	207	588	189	189	194	194	189	182	194	194	189	182	194	194	558	558	558	558
NON CV-R	178	158	336	336	198	205	198	583	192	182	214	214	192	182	214	214	192	182	214	214	588	588	588	588
CANCER	70	60	130	130	76	86	66	228	87	68	94	94	87	68	94	94	87	68	94	94	249	249	249	249

NEW JERSEY
STATE
1950 BANK BY POPULATION 315
1950 POP/50. MILE 17290
1970 POP/50. MILE 14803
1949 MED. FAM. INCOME 3521
1969 MED. FAM. INCOME 9481
URBAN CLASS PRINCE
1950 URBAN AREA RANK 1
JAN MEAN TEMPERATURE 28
JULY MEAN TEMPERATURE 73
MEAN ANN. PRECIPITATION 39
LAND RESOURCE REGION R
WATER SOURCE
TOTAL HARDNESS 84 PPM
NON-CARBONATE HARDNESS 38 PPM
FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	442	416	46	42	408	402	76	80	393	372	150	134
1-4	1886	1793	142	133	1538	1505	236	256	1269	1284	534	524
5-9	1820	1835	120	112	1794	1746	269	304	1604	1595	696	725
10-14	1336	1402	103	106	1904	1920	214	432	1632	1744	969	612
15-19	1494	1636	107	135	1449	1583	151	175	1707	1901	352	540
20-24	1931	2216	140	161	1324	1293	169	230	1436	1393	366	549
25-29	2305	2475	148	170	1549	1620	165	217	1158	1049	306	394
30-34	2368	2538	113	134	1808	1850	186	200	1056	1038	290	337
35-39	2329	2567	102	118	1708	1958	107	169	1187	1311	283	323
40-44	1506	1828	90	97	1963	1977	123	158	1483	1655	219	264
45-49	1732	1994	71	63	1605	1642	113	114	1413	1633	179	206
50-54	1686	1787	37	45	1415	1562	69	85	1488	1603	130	184
55-59	1528	1434	30	39	1284	1608	61	62	1428	1428	129	164
60-64	1037	1042	24	26	1170	1418	43	44	906	1204	78	135
65-69	589	677	16	22	904	1028	22	37	681	1110	53	77
70-74	520	534	10	10	465	597	10	16	516	761	24	40
75-79*	0	0	0	0	184	255	7	9	303	442	17	31
80-84*	59	83	2	3	97	152	4	7	145	250	16	33
85-UP												
TOTALS	26594	28097	1421	1590	23732	25471	2207	2553	21272	23257	4832	5763
GRAND TOTAL				57702				53963				55124

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1182.0	1009.7	1.171	1882.0	1775.9	1.060	2063.0	2039.7	1.011
CV-RENAL	611.0	541.5	1.128	1078.0	996.3	1.082	1157.0	1175.6	0.984
HEART	448.0	394.9	1.135	843.0	716.0	1.177	924.0	821.7	1.124
NON CV-R	571.0	468.2	1.220	804.0	779.7	1.031	906.0	864.2	1.048
CANCER	221.0	175.1	1.262	340.0	298.2	1.140	398.0	314.5	1.265

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	554	628	599	601	662	681	684	698
CV-RENAL	287	324	344	345	387	385	382	378
HEART	209	239	277	268	307	318	307	293
NON CV-R	267	304	255	276	273	286	301	319
CANCER	105	116	123	125	92	121	132	145
49-50								
59-61								
69-71								
STATE								
1950 POP/1000								
1950 POP/1000								
1970 POP/1000								
1949 MED. FAM. INCOME								
1969 MED. FAM. INCOME								
URBAN CLASS								
1950 URBAN AREA RANK								
JAN MEAN TEMPERATURE								
JULY MEAN TEMPERATURE								
MEAN ANN. PRECIPITATION								
LAND RESOURCE REGION								
WATER SOURCE								
TOTAL HARDNESS								
NON-CARBONATE HARDNESS								
FLUORIDATION STATUS								

NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	NH	NM	NP	NH	NM	NP	NH	NM	NP	NH	NM	NP	NH	NM	NP	NH	NM	NP
LT 1	342	16	5	313	297	18	303	265	39	303	265	39	303	265	39	303	265	39
1-4	1426	326	48	1235	1222	63	1051	1061	146	1051	1061	146	1051	1061	146	1051	1061	146
5-9	1446	1459	49	1373	1425	94	1357	1431	263	1357	1431	263	1357	1431	263	1357	1431	263
10-14	1196	1123	39	1486	1428	28	1393	1468	132	1393	1468	132	1393	1468	132	1393	1468	132
15-19	1067	1076	38	1139	1163	42	1293	1548	129	1293	1548	129	1293	1548	129	1293	1548	129
20-24	1354	1366	62	1036	1010	62	1111	1107	132	1111	1107	132	1111	1107	132	1111	1107	132
25-29	1711	1744	62	1196	1194	68	1116	867	100	1116	867	100	1116	867	100	1116	867	100
30-34	2010	2194	43	1339	1410	68	839	889	95	839	889	95	839	889	95	839	889	95
35-39	1968	1722	43	1476	1559	56	1013	1127	73	1013	1127	73	1013	1127	73	1013	1127	73
40-44	1520	1420	43	1486	1399	27	1137	1321	87	1137	1321	87	1137	1321	87	1137	1321	87
45-49	1234	1158	30	1188	1134	37	1274	1493	48	1274	1493	48	1274	1493	48	1274	1493	48
50-54	1134	1214	38	974	999	23	1275	1272	45	1275	1272	45	1275	1272	45	1275	1272	45
55-59	1114	1138	23	1061	1021	30	939	1012	28	939	1012	28	939	1012	28	939	1012	28
60-64	1061	1061	20	769	764	16	636	812	25	636	812	25	636	812	25	636	812	25
65-69	753	715	16	655	690	14	424	770	17	424	770	17	424	770	17	424	770	17
70-74	359	385	5	322	356	5	329	514	6	329	514	6	329	514	6	329	514	6
75-79*	289	325	2	116	123	3	171	312	4	171	312	4	171	312	4	171	312	4
80-84*	0	0	0	56	74	0	102	138	1	102	138	1	102	138	1	102	138	1
85-UP	55	45	1	17835	18565	792	17031	18710	1450	17031	18710	1450	17031	18710	1450	17031	18710	1450
TOTALS	20073	20095	613	549	549	815	38007	38007	38007	38007	38007	38007	38007	38007	38007	38007	38007	38007
GRAND TOTAL																		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	838.0	1330.0	1.387.0	657.7	1125.8	1.718.1	1.274	1.181	1.066
CV-RENAL	443.0	778.0	791.0	346.9	622.9	748.3	1.277	1.249	1.057
HEART	291.0	601.0	609.0	254.7	452.5	591.1	1.143	1.328	1.147
NON CV-R	395.0	552.0	596.0	310.8	502.9	553.4	1.271	1.098	1.077
CANCER	153.0	253.0	264.0	114.5	193.9	211.4	1.336	1.305	1.249

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	NEW JERSEY	
	STATE	PERTH AMBOY
1950 RANK BY POPULATION	290	9393
1950 POP/SQ. MILE	8255	8255
1970 POP/SQ. MILE	3462	3462
1949 MED. FAM. INCOME	9413	9413
1969 MED. FAM. INCOME	FRINGE	FRINGE
URBAN CLASS	1	1
1950 URBAN AREA RANK	30	30
JAN MEAN TEMPERATURE	72	72
JULY MEAN TEMPERATURE	46	46
MEAN ANN. PRECIPITATION	S	S
LAND RESOURCE REGION	5	5
WATER SOURCE	GROUND	GROUND
TOTAL HARDNESS	65 PPM	65 PPM
NON-CARBONATE HARDNESS	31 PPM	31 PPM
FLUORIDATION STATUS	UNCERTAIN	UNCERTAIN

PLAINFIELD
-280-

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	349	315	58	64	394	356	136	155	259	232	218	235
1-4	1454	1363	219	235	1364	1317	560	565	904	854	894	888
5-9	1370	1464	213	251	1494	1543	504	554	1046	981	1256	868
10-14	1053	1011	198	185	1416	1395	427	428	947	947	1197	1224
15-19	985	1080	198	237	999	1163	294	327	875	1005	802	866
20-24	1079	1450	232	269	838	1097	295	387	944	1234	589	792
25-29	1447	1651	265	298	1107	1084	368	399	1034	1079	606	802
30-34	1484	1598	234	253	1138	1225	378	444	729	677	596	726
35-39	1373	1536	201	224	1129	1267	400	418	645	666	616	687
40-44	1319	1372	213	254	1167	1333	322	332	742	773	552	623
45-49	1136	1226	199	239	1123	1238	249	274	784	862	522	487
50-54	1119	1217	167	162	1092	1153	198	237	837	948	326	380
55-59	960	1051	108	129	905	1014	206	232	780	974	311	334
60-64	781	891	64	94	822	997	150	159	735	885	206	259
65-69	614	781	60	80	625	892	101	126	529	788	154	246
70-74	385	550	32	41	479	752	61	85	438	753	108	166
75-79*	379	577	43	41	319	472	38	60	307	550	43	82
80-84*	0	0	0	0	146	273	19	26	196	350	26	62
85-UP	55	123	1	10	92	169	7	20	98	262	24	56
TOTALS	17342	19256	2705	3063	16649	18740	4713	5228	12857	14820	9036	10449
GRAND TOTAL				42366				45330				46862

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	908.0	1493.0	1.117		908.0	1493.0	1.117		908.0	1485.0	1.117	
CV-RENAL	505.0	859.0	1.134		505.0	859.0	1.134		505.0	757.0	1.134	
HEART	363.0	631.0	1.154		363.0	631.0	1.154		363.0	549.0	1.154	
NON CV-R	403.0	634.0	1.037		403.0	634.0	1.037		403.0	728.0	1.037	
CANCER	166.0	284.0	1.277		166.0	284.0	1.277		166.0	279.0	1.277	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	439	469	908		486	529	478	1493	482	507	496	1485
CV-RENAL	236	269	505		268	304	287	859	227	274	256	757
HEART	174	189	363		199	218	214	631	165	189	195	549
NON CV-R	203	200	403		218	225	191	634	255	233	240	728
CANCER	78	88	166		82	109	93	284	94	87	98	279

CITY CHARACTERISTICS

STATF	NEW JERSEY	
	1950 POP/50. MILE	280
1950 POP/50. MILE	7061	
1970 POP/50. MILE	7810	
1949 MED. FAM. INCOME	4212	
1969 MED. FAM. INCOME	10951	
URBAN CLASS	FRINGE	
1950 URBAN AREA RANK	1	
JAN MEAN TEMPERATURE	30	
JULY MEAN TEMPERATURE	74	
MEAN ANN. PRECIPITATION	49	
LAND RESOURCE REGION	S	
WATER SOURCE		
TOTAL HARDNESS	305 PPM	
NON-CARBONATE HARDNESS	245 PPM	
FLUORIDATION STATUS	NO ARTIFICIAL LOW NATURAL	

GROUND AND SURFACE

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	898	879	155	160	677	686	394	382
1-4	3830	3582	643	612	2667	2685	1074	1068
5-9	3557	3364	648	612	2390	2300	1579	1602
10-14	3172	2895	607	610	3229	3109	1103	1176
15-19	3270	2895	607	610	2731	3210	1007	1003
20-24	4256	4815	737	733	2630	2620	866	1056
25-29	5155	5093	855	765	2557	2256	1071	1139
30-34	4900	5024	770	683	2850	2550	1235	1168
35-39	4679	4424	698	584	2887	3078	1111	984
40-44	3883	3997	521	461	3067	3412	850	768
45-49	3471	3665	439	406	3280	3339	704	617
50-54	3538	3798	332	296	2900	2990	498	474
55-59	3387	3504	245	186	2534	2862	430	410
60-64	2999	3035	170	130	2346	2915	251	301
65-69	2215	2281	111	116	2166	2625	200	197
70-74	1224	1531	58	52	1781	2053	133	130
75-79*	972	1520	38	59	1000	1203	60	73
80-84*	0	0	0	0	393	583	27	35
85-UP	146	323	10	15	155	313	19	37
TOTALS	55848	57629	7410	7122	42956	45359	12812	13020
GRAND TOTAL				128009				114147

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959-61			
	WM	WF	NH	NF	WM	WF	NH	NF
TOTAL	1049	1389	2638	2638	1480	1476	4384	4384
CY-RENAL	771	749	1520	1520	812	809	2427	2427
HEART	511	530	1041	1041	567	580	1781	1781
NON CV-R	678	640	1318	1318	668	619	670	1957
CANCER	225	231	456	456	254	238	261	753

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61			
	WM	WF	NH	NF	WM	WF	NH	NF
TOTAL	2838.0	4384.0	1414.3	1414.3	2838.0	4384.0	1414.3	1414.3
EXPECTED*	2330.6	3794.9	1247.3	1247.3	2330.6	3794.9	1247.3	1247.3
OBS/EXP	1.218	1.155	1.050	1.050	1.218	1.155	1.050	1.050
CY-RENAL	1520.0	2427.0	2224.0	2224.0	1520.0	2427.0	2224.0	2224.0
EXPECTED*	1262.1	2089.3	2248.0	2248.0	1262.1	2089.3	2248.0	2248.0
OBS/EXP	1.204	1.162	0.989	0.989	1.204	1.162	0.989	0.989
HEART	1041.0	1781.0	1666.0	1666.0	1041.0	1781.0	1666.0	1666.0
EXPECTED*	905.7	1482.4	1548.8	1548.8	905.7	1482.4	1548.8	1548.8
OBS/EXP	1.149	1.201	1.076	1.076	1.149	1.201	1.076	1.076
NON CV-R	1318.0	1957.0	1919.0	1919.0	1318.0	1957.0	1919.0	1919.0
EXPECTED*	1068.5	1705.6	1699.2	1699.2	1068.5	1705.6	1699.2	1699.2
OBS/EXP	1.234	1.147	1.129	1.129	1.234	1.147	1.129	1.129
CANCER	456.0	753.0	712.0	712.0	456.0	753.0	712.0	712.0
EXPECTED*	385.6	609.3	589.0	589.0	385.6	609.3	589.0	589.0
OBS/EXP	1.183	1.236	1.209	1.209	1.183	1.236	1.209	1.209

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	NEW JERSEY	
	1950 RANK BY POPULATION	79
1950 POP./SQ. MILE	1779	
1970 POP./SQ. MILE	13952	
1949 MED. FAM. INCOME	3735	
1969 MED. FAM. INCOME	8726	
URBAN CLASS	CENTRAL	
1950 URBAN AREA RANK	65	
JAN MEAN TEMPERATURE	32	
JULY MEAN TEMPERATURE	75	
MEAN ANN. PRECIPITATION	40	
LAND RESOURCE REGION	S	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	53 PPM	
NON-CARBONATE HARDNESS	33 PPM	
FLUORIDATION STATUS	FLUORIDATED IN 1964	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NH	NE	WM	WP	NH	NE	WM	WP	NH	NE
LT 1	491	417	1	1	535	491	2	4	387	386	17	16
1-4	1979	1831	2	0	1875	1769	12	6	1500	1505	59	42
5-9	1787	1777	5	0	2034	1861	9	3	2505	2294	51	53
10-14	1389	1409	13	0	1871	1796	5	5	2339	2174	64	62
15-19	1545	1659	0	4	1553	1619	7	3	2075	2168	38	50
20-24	1905	2125	2	2	1444	1582	6	4	1587	2151	48	75
25-29	2174	2352	1	3	1762	1717	9	9	1667	1834	72	85
30-34	1597	2381	0	3	1813	1783	7	11	1846	1940	66	57
35-39	2058	2282	4	1	1732	1792	6	6	1868	1967	64	63
40-44	2066	2259	1	1	1543	1825	3	3	1993	2071	64	60
45-49	2008	2078	4	1	1697	1914	4	3	1993	2071	64	60
50-54	2027	2043	6	2	1642	1883	1	2	1852	2075	32	39
55-59	1670	1806	3	0	1633	1622	4	2	1530	1858	35	24
60-64	1419	1420	3	1	1486	1595	4	2	1580	1858	22	26
65-69	1038	1357	1	0	1167	1364	3	0	1059	1544	13	19
70-74	539	916	5	0	717	1020	0	0	791	1787	8	17
75-79	542	702	0	1	451	705	1	0	511	785	4	10
80-84	0	0	0	0	203	275	0	0	241	486	2	3
85-UP	66	111	0	2	84	139	0	0	147	276	3	0
TOTALS	26799	28667	49	22	25280	26755	83	62	27049	30099	690	699
GRAND TOTAL				55537				52180				58537

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1215.0	2056.0	1947.0		1038.8	1668.8	1961.2		1038.8	1668.8	1961.2	
					1.170	1.232	0.993		1.170	1.232	0.993	
CV-RENAL	709.0	1196.0	1123.0		573.2	938.7	1148.3		573.2	938.7	1148.3	
					1.237	1.268	0.978		1.237	1.268	0.978	
HEART	558.0	943.0	841.0		477.3	680.5	814.5		477.3	680.5	814.5	
					1.337	1.386	1.155		1.337	1.386	1.155	
NON CV-R	506.0	866.0	824.0		465.6	730.1	842.9		465.6	730.1	842.9	
					1.067	1.186	1.014		1.067	1.186	1.014	
CANCER	231.0	362.0	364.0		180.2	286.0	319.8		180.2	286.0	319.8	
					1.282	1.266	1.138		1.282	1.266	1.138	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949-50				1959-61				1969-71			
	WM	WP	NH	NE	WM	WP	NH	NE	WM	WP	NH	NE
TOTAL	605	610	1215	SUM	682	670	704	SUM	646	645	646	1947
CV-RENAL	350	359	709		389	377	424		365	376	365	1123
HEART	267	291	558		307	292	344		319	302	319	941
NON CV-R	255	251	506		293	280	280		269	281	269	824
CANCER	120	111	231		135	127	100		128	108	128	364

CITY CHARACTERISTICS	NEW JERSEY			
	STATE	1950 RANK BY POPULATION	208	
	1950 POP/50. MILE	42721		
	1970 POP/50. MILE	45028		
	1949 MED. FAM. INCOME	3381		
	1969 MED. FAM. INCOME	8851		
	URBAN CLASS	FRNGE		
	1950 URBAN AREA RANK	1		
	JAN MEAN TEMPERATURE	32		
	JULY MEAN TEMPERATURE	75		
	MEAN ANN. PRECIPITATION	44		
	LAND RESOURCE REGION	R		
	WATER SOURCE	SURFACE		
	TOTAL HARDNESS	69 PPM		
	NON-CARBONATE HARDNESS	38 PPM		
	FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	326	295	1	3	378	369	4	4	266	285	16	9
1-4	1442	1242	15	11	1234	1261	13	13	1075	962	29	30
5-9	1251	1165	10	14	1277	1223	14	19	1642	1558	49	45
10-14	957	960	14	10	1286	1077	17	9	1535	1450	43	37
15-19	1077	1098	2	5	1034	1020	8	10	1359	1467	37	43
20-24	1324	1521	4	12	952	1185	6	7	1060	1272	26	23
25-29	1500	1649	12	10	1174	1232	3	8	1063	1351	40	41
30-34	1489	1681	10	9	1360	1217	12	12	1291	1404	37	48
35-39	1520	1712	15	14	1135	1269	9	6	1356	1397	45	54
40-44	1386	1487	8	10	1110	1382	8	3	1446	1542	48	37
45-49	1350	1385	4	3	1223	1392	8	7	1393	1457	27	28
50-54	1305	1438	3	4	1138	1267	5	9	1208	1460	18	22
55-59	1210	1131	3	4	1024	1141	12	6	1142	1370	14	19
60-64	959	855	2	3	919	1109	6	3	933	1136	11	14
65-69	624	640	5	4	779	899	2	0	749	1003	9	9
70-74	366	427	2	1	586	656	0	3	317	844	1	7
75-79*	259	335	1	1	423	563	0	4	207	577	3	7
80-84*	0	0	0	0	183	160	0	1	195	247	2	5
85-89*	30	55	0	2	56	76	0	0	98	144	3	2
TOTALS	18375	19076	112	120	16937	18298	122	130	18667	21012	468	480
GRAND TOTAL				37683				35547				40627

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	748.0	1222.0	614.2		748.0	1080.7	614.2		748.0	1227.0	614.2	
			1.218			1.131	1.218			0.906	1.131	
CV-RENAL	447.0	722.0	325.7		447.0	596.6	325.7		447.0	728.0	325.7	
			1.372			1.210	1.372			0.925	1.210	
HEART	355.0	590.0	240.1		355.0	434.3	240.1		355.0	594.0	240.1	
			1.479			1.359	1.479			1.060	1.359	
NON CV-R	301.0	500.0	288.6		301.0	484.2	288.6		301.0	499.0	288.6	
			1.043			1.033	1.043			0.879	1.033	
CANCER	144.0	219.0	109.1		144.0	187.3	109.1		144.0	231.0	109.1	
			1.320			1.169	1.320			1.027	1.169	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1971			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	414	334	748	144	400	411	411	1222	401	411	415	1227	415	411	415	1227
CV-RENAL	246	201	447	201	251	246	225	722	232	247	249	728	249	247	249	728
HEART	196	159	355	183	206	201	183	590	190	194	210	594	210	194	210	594
NON CV-R	168	133	301	144	149	165	186	500	169	164	166	499	166	164	166	499
CANCER	77	67	144	62	62	80	77	219	76	80	75	231	75	80	75	231

CITY CHARACTERISTICS

STATE	NEW JERSEY
1950 RANK BY POPULATION	317
1950 POP./SQ. MILE	34257
1970 POP./SQ. MILE	40627
1949 MED. FAM. INCOME	3607
1969 MED. FAM. INCOME	9480
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	1
JAN MEAN TEMPERATURE	32
JULY MEAN TEMPERATURE	75
MEAN ANN. PRECIPITATION	44
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	99 PPM
NON-CARBONATE HARDNESS	38 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	257	215	0	1	381	371	3	4
1-4	1133	1059	3	4	1502	1502	5	9
5-9	1139	1129	3	4	2003	1789	5	7
10-14	899	922	5	8	1856	1845	6	6
15-19	873	907	3	3	1326	1350	4	21
20-24	839	944	4	21	717	883	8	22
25-29	914	1019	1	9	954	1093	10	29
30-34	976	1115	6	11	1194	1421	13	24
35-39	1079	1270	6	14	1430	1563	9	19
40-44	1136	1230	8	13	1425	1547	3	15
45-49	1067	1153	2	7	1465	1597	3	21
50-54	1020	1006	4	5	1334	1416	5	13
55-59	815	825	1	4	1192	1241	2	14
60-64	615	652	1	7	852	1069	2	9
65-69	433	508	0	2	601	710	3	4
70-74	267	360	0	2	408	581	2	4
75-79	225	358	0	0	208	321	0	3
80-84	0	0	0	0	90	185	0	0
85-UP	30	73	0	1	68	110	0	0
TOTALS	13709	14734	47	115	19158	20428	85	224
GRAND TOTAL				28605				39695

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949		1950		1959		1960		1961		59-61	
	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	SUM	SUM
TOTAL	260	275			329	353	359	1041				
CV-RENAL												
HEART												
NON CV-R												
CANCER												

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949		1950		1959		1960		1961		1970		1971		69-71	
	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	SUM	SUM
TOTAL	260	275			329	353	359	1041			407	415	377		1199	
CV-RENAL																
HEART																
NON CV-R																
CANCER																

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBSERVED	EXPECTED*
TOTAL	535.0	1041.0	1199.0	1543.7	0.975	0.777
CV-RENAL						
HEART						
NON CV-R						
CANCER						

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	NEW JERSEY	
	1950 RANK BY POPULATION	427
1950 POP/SQ. MILE	2288	
1970 POP/SQ. MILE	3643	
1949 MED. FAM. INCOME	4642	
1969 MED. FAM. INCOME	13879	
URBAN CLASS		
1950 URBAN AREA RANK	1	
JAN MEAN TEMPERATURE	28	
JULY MEAN TEMPERATURE	73	
MEAN ANN. PRECIPITATION	39	
LAND RESOURCE REGION	R	
WATER SOURCE		
TOTAL HARDNESS	124 PPM	
NON-CARBONATE HARDNESS	42 PPM	
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	1274	1269	24	31	2937	2867	115	120	2123	2006	132	133
1-4	4904	4670	81	111	11090	10454	392	405	8013	7795	468	506
5-9	4231	4286	83	81	11765	11563	353	366	12621	12208	698	660
10-14	3330	3393	65	62	9864	9599	239	263	12621	12768	578	615
15-19	2866	3516	58	87	6500	7362	175	270	11294	12101	542	790
20-24	4280	4631	99	123	6489	7420	241	364	9704	11249	450	644
25-29	4927	4979	104	129	7122	7283	306	324	8065	8546	381	455
30-34	4286	4236	91	91	7184	7508	226	240	6730	7164	308	359
35-39	3720	3948	100	72	7443	7890	198	197	6471	7078	262	399
40-44	3224	3310	62	56	6585	6517	153	175	6722	7388	243	290
45-49	2569	2584	55	38	5334	5494	119	105	6988	7587	212	230
50-54	2199	2259	51	38	4018	4265	90	89	5949	6274	177	192
55-59	1633	1656	34	26	3004	3255	81	71	4687	5294	111	152
60-64	1274	1233	25	13	2217	2622	41	55	3544	4251	92	109
65-69	871	983	15	20	1794	2254	33	34	2426	3169	73	91
70-74	487	590	7	12	1249	1475	16	15	1749	2441	60	52
75-79#	428	619	7	11	693	916	19	11	1117	1731	42	28
80-84#	0	0	0	0	285	484	6	9	633	1029	15	20
85-UP	77	107	2	2	169	294	3	6	337	637	14	14
TOTALS	46580	48269	963	1003	95742	99522	2806	3119	112438	120716	4858	5739
GRAND TOTAL				96815				201189				243751

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1413.0	4046.0	5993.0	1142.4	3635.1	5359.6	1.237	1.113	1.118
CV-RENAL	524.0	1519.0	2323.0	539.7	1715.5	2861.1	0.971	0.885	0.812
HEART	375.0	1006.0	1620.0	392.5	1241.7	2040.2	0.956	0.810	0.794
NON CV-R	869.0	2527.0	3670.0	602.7	1919.6	2498.5	1.475	1.316	1.469
CANCER	159.0	548.0	962.0	182.3	568.6	861.3	0.872	0.957	1.117

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				49-50				59-61				1969				1970				1971				69-71				STATE				1950 RANK BY POPULATION				NEW MEXICO																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	SUM	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	SUM	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	SUM	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	SUM	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	SUM	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	661	233	164	428	78	752	291	211	461	81	1413	524	375	889	159	1260	445	298	815	174	1404	522	346	882	181	1382	552	362	830	189	4046	1519	1006	2527	544	1886	740	534	1146	315	2006	527	1231	1293	3670	962	1950	POP/SQ. MILE	1970	POP/SQ. MILE	1971	POP/SQ. MILE	1972	POP/SQ. MILE	1973	POP/SQ. MILE	1974	POP/SQ. MILE	1975	POP/SQ. MILE	1976	POP/SQ. MILE	1977	POP/SQ. MILE	1978	POP/SQ. MILE	1979	POP/SQ. MILE	1980	POP/SQ. MILE	1981	POP/SQ. MILE	1982	POP/SQ. MILE	1983	POP/SQ. MILE	1984	POP/SQ. MILE	1985	POP/SQ. MILE	1986	POP/SQ. MILE	1987	POP/SQ. MILE	1988	POP/SQ. MILE	1989	POP/SQ. MILE	1990	POP/SQ. MILE	1991	POP/SQ. MILE	1992	POP/SQ. MILE	1993	POP/SQ. MILE	1994	POP/SQ. MILE	1995	POP/SQ. MILE	1996	POP/SQ. MILE	1997	POP/SQ. MILE	1998	POP/SQ. MILE	1999	POP/SQ. MILE	2000	POP/SQ. MILE	2001	POP/SQ. MILE	2002	POP/SQ. MILE	2003	POP/SQ. MILE	2004	POP/SQ. MILE	2005	POP/SQ. MILE	2006	POP/SQ. MILE	2007	POP/SQ. MILE	2008	POP/SQ. MILE	2009	POP/SQ. MILE	2010	POP/SQ. MILE	2011	POP/SQ. MILE	2012	POP/SQ. MILE	2013	POP/SQ. MILE	2014	POP/SQ. MILE	2015	POP/SQ. MILE	2016	POP/SQ. MILE	2017	POP/SQ. MILE	2018	POP/SQ. MILE	2019	POP/SQ. MILE	2020	POP/SQ. MILE	2021	POP/SQ. MILE	2022	POP/SQ. MILE	2023	POP/SQ. MILE	2024	POP/SQ. MILE	2025	POP/SQ. MILE	2026	POP/SQ. MILE	2027	POP/SQ. MILE	2028	POP/SQ. MILE	2029	POP/SQ. MILE	2030	POP/SQ. MILE	2031	POP/SQ. MILE	2032	POP/SQ. MILE	2033	POP/SQ. MILE	2034	POP/SQ. MILE	2035	POP/SQ. MILE	2036	POP/SQ. MILE	2037	POP/SQ. MILE	2038	POP/SQ. MILE	2039	POP/SQ. MILE	2040	POP/SQ. MILE	2041	POP/SQ. MILE	2042	POP/SQ. MILE	2043	POP/SQ. MILE	2044	POP/SQ. MILE	2045	POP/SQ. MILE	2046	POP/SQ. MILE	2047	POP/SQ. MILE	2048	POP/SQ. MILE	2049	POP/SQ. MILE	2050	POP/SQ. MILE	2051	POP/SQ. MILE	2052	POP/SQ. MILE	2053	POP/SQ. MILE	2054	POP/SQ. MILE	2055	POP/SQ. MILE	2056	POP/SQ. MILE	2057	POP/SQ. MILE	2058	POP/SQ. MILE	2059	POP/SQ. MILE	2060	POP/SQ. MILE	2061	POP/SQ. MILE	2062	POP/SQ. MILE	2063	POP/SQ. MILE	2064	POP/SQ. MILE	2065	POP/SQ. MILE	2066	POP/SQ. MILE	2067	POP/SQ. MILE	2068	POP/SQ. MILE	2069	POP/SQ. MILE	2070	POP/SQ. MILE	2071	POP/SQ. MILE	2072	POP/SQ. MILE	2073	POP/SQ. MILE	2074	POP/SQ. MILE	2075	POP/SQ. MILE	2076	POP/SQ. MILE	2077	POP/SQ. MILE	2078	POP/SQ. MILE	2079	POP/SQ. MILE	2080	POP/SQ. MILE	2081	POP/SQ. MILE	2082	POP/SQ. MILE	2083	POP/SQ. MILE	2084	POP/SQ. MILE	2085	POP/SQ. MILE	2086	POP/SQ. MILE	2087	POP/SQ. MILE	2088	POP/SQ. MILE	2089	POP/SQ. MILE	2090	POP/SQ. MILE	2091	POP/SQ. MILE	2092	POP/SQ. MILE	2093	POP/SQ. MILE	2094	POP/SQ. MILE	2095	POP/SQ. MILE	2096	POP/SQ. MILE	2097	POP/SQ. MILE	2098	POP/SQ. MILE	2099	POP/SQ. MILE	2100	POP/SQ. MILE	2101	POP/SQ. MILE	2102	POP/SQ. MILE	2103	POP/SQ. MILE	2104	POP/SQ. MILE	2105	POP/SQ. MILE	2106	POP/SQ. MILE	2107	POP/SQ. MILE	2108	POP/SQ. MILE	2109	POP/SQ. MILE	2110	POP/SQ. MILE	2111	POP/SQ. MILE	2112	POP/SQ. MILE	2113	POP/SQ. MILE	2114	POP/SQ. MILE	2115	POP/SQ. MILE	2116	POP/SQ. MILE	2117	POP/SQ. MILE	2118	POP/SQ. MILE	2119	POP/SQ. MILE	2120	POP/SQ. MILE	2121	POP/SQ. MILE	2122	POP/SQ. MILE	2123	POP/SQ. MILE	2124	POP/SQ. MILE	2125	POP/SQ. MILE	2126	POP/SQ. MILE	2127	POP/SQ. MILE	2128	POP/SQ. MILE	2129	POP/SQ. MILE	2130	POP/SQ. MILE	2131	POP/SQ. MILE	2132	POP/SQ. MILE	2133	POP/SQ. MILE	2134	POP/SQ. MILE	2135	POP/SQ. MILE	2136	POP/SQ. MILE	2137	POP/SQ. MILE	2138	POP/SQ. MILE	2139	POP/SQ. MILE	2140	POP/SQ. MILE	2141	POP/SQ. MILE	2142	POP/SQ. MILE	2143	POP/SQ. MILE	2144	POP/SQ. MILE	2145	POP/SQ. MILE	2146	POP/SQ. MILE	2147	POP/SQ. MILE	2148	POP/SQ. MILE	2149	POP/SQ. MILE	2150	POP/SQ. MILE	2151	POP/SQ. MILE	2152	POP/SQ. MILE	2153	POP/SQ. MILE	2154	POP/SQ. MILE	2155	POP/SQ. MILE	2156	POP/SQ. MILE	2157	POP/SQ. MILE	2158	POP/SQ. MILE	2159	POP/SQ. MILE	2160	POP/SQ. MILE	2161	POP/SQ. MILE	2162	POP/SQ. MILE	2163	POP/SQ. MILE	2164	POP/SQ. MILE	2165	POP/SQ. MILE	2166	POP/SQ. MILE	2167	POP/SQ. MILE	2168	POP/SQ. MILE	2169	POP/SQ. MILE	2170	POP/SQ. MILE	2171	POP/SQ. MILE	2172	POP/SQ. MILE	2173	POP/SQ. MILE	2174	POP/SQ. MILE	2175	POP/SQ. MILE	2176	POP/SQ. MILE	2177	POP/SQ. MILE	2178	POP/SQ. MILE	2179	POP/SQ. MILE	2180	POP/SQ. MILE	2181	POP/SQ. MILE	2182	POP/SQ. MILE	2183	POP/SQ. MILE	2184	POP/SQ. MILE	2185	POP/SQ. MILE	2186	POP/SQ. MILE	2187	POP/SQ. MILE	2188	POP/SQ. MILE	2189	POP/SQ. MILE	2190	POP/SQ. MILE	2191	POP/SQ. MILE	2192	POP/SQ. MILE	2193	POP/SQ. MILE	2194	POP/SQ. MILE	2195	POP/SQ. MILE	2196	POP/SQ. MILE	2197	POP/SQ. MILE	2198	POP/SQ. MILE	2199	POP/SQ. MILE	2200	POP/SQ. MILE	2201	POP/SQ. MILE	2202	POP/SQ. MILE	2203	POP/SQ. MILE	2204	POP/SQ. MILE	2205	POP/SQ. MILE	2206	POP/SQ. MILE	2207	POP/SQ. MILE	2208	POP/SQ. MILE	2209	POP/SQ. MILE	2210	POP/SQ. MILE	2211	POP/SQ. MILE	2212	POP/SQ. MILE	2213	POP/SQ. MILE	2214	POP/SQ. MILE	2215	POP/SQ. MILE	2216	POP/SQ. MILE	2217	POP/SQ. MILE	2218	POP/SQ. MILE	2219	POP/SQ. MILE	2220	POP/SQ. MILE	2221	POP/SQ. MILE	2222	POP/SQ. MILE	2223	POP/SQ. MILE	2224	POP/SQ. MILE	2225	POP/SQ. MILE	2226	POP/SQ. MILE	2227	POP/SQ. MILE	2228	POP/SQ. MILE	2229	POP/SQ. MILE	2230	POP/SQ. MILE	2231	POP/SQ. MILE	2232	POP/SQ. MILE	2233	POP/SQ. MILE	2234	POP/SQ. MILE	2235	POP/SQ. MILE	2236	POP/SQ. MILE	2237	POP/SQ. MILE	2238	POP/SQ. MILE	2239	POP/SQ. MILE	2240	POP/SQ. MILE	2241	POP/SQ. MILE	2242	POP/SQ. MILE	2243	POP/SQ. MILE	2244	POP/SQ. MILE	2245	POP/SQ. MILE	2246	POP/SQ. MILE	2247	POP/SQ. MILE	2248	POP/SQ. MILE	2249	POP/SQ. MILE	2250	POP/SQ. MILE	2251	POP/SQ. MILE	2252	POP/SQ. MILE	2253	POP/SQ. MILE	2254	POP/SQ. MILE	2255	POP/SQ. MILE	2256	POP/SQ. MILE	2257	POP/SQ. MILE	2258	POP/SQ. MILE	2259	POP/SQ. MILE	2260	POP/SQ. MILE	2261	POP/SQ. MILE	2262	POP/SQ. MILE	2263	POP/SQ. MILE	2264	POP/SQ. MILE	2265	POP/SQ. MILE	2266	POP/SQ. MILE	2267	POP/SQ. MILE	2268	POP/SQ. MILE	2269	POP/SQ. MILE	2270	POP/SQ. MILE	2271	POP/SQ. MILE	2272	POP/SQ. MILE	2273	POP/SQ. MILE	2274	POP/SQ. MILE	2275	POP/SQ. MILE	2276	POP/SQ. MILE	2277	POP/SQ. MILE	2278	POP/SQ. MILE	2279	POP/SQ. MILE	2280	POP/SQ. MILE	2281	POP/SQ. MILE	2282	POP/SQ. MILE	2283	POP/SQ. MILE	2284	POP/SQ. MILE	2285	POP/SQ. MILE	2286	POP/SQ. MILE	2287	POP/SQ. MILE	2288	POP/SQ. MILE	2289	POP/SQ. MILE	2290	POP/SQ. MILE	2291	POP/SQ. MILE	2292	POP/SQ. MILE	2293	POP/SQ. MILE	2294	POP/SQ. MILE	2295	POP/SQ. MILE	2296	POP/SQ. MILE	2297	POP/SQ. MILE	2298	POP/SQ. MILE	2299	POP/SQ. MILE	2300	POP/SQ. MILE	2301	POP/SQ. MILE	2302	POP/SQ. MILE	2303	POP/SQ. MILE	2304	POP/SQ. MILE	2305	POP/SQ. MILE	2306	POP/SQ. MILE	2307	POP/SQ. MILE	2308	POP/SQ. MILE	2309	POP/SQ. MILE	2310	POP/SQ. MILE	2311	POP/SQ. MILE	2312	POP/SQ. MILE	2313	POP/SQ. MILE	2314	POP/SQ. MILE	2315	POP/SQ. MILE	2316	POP/SQ. MILE	2317	POP/SQ. MILE	2318	POP/SQ. MILE	2319	POP/SQ. MILE	2320	POP/SQ. MILE	2321	POP/SQ. MILE	2322	POP/SQ. MILE	2323	POP/SQ. MILE	2324	POP/SQ. MILE	2325	POP/SQ. MILE	2326	POP/SQ. MILE	2327	POP/SQ. MILE	2328	POP/SQ. MILE	2329	POP/SQ. MILE	2330	POP/SQ. MILE	2331	POP/SQ. MILE	2332	POP/SQ. MILE	2333	POP/SQ. MILE	2334	POP/SQ. MILE	2335	POP/SQ. MILE	2336	POP/SQ. MILE	2337	POP/SQ. MILE	2338	POP/SQ. MILE	2339	POP/SQ. MILE	2340	POP/SQ. MILE	2341	POP/SQ. MILE	2342	POP/SQ. MILE	2343	POP/SQ. MILE	2344	POP/SQ. MILE	2345	POP/SQ. MILE	2346	POP/SQ. MILE	2347	POP/SQ. MILE	2348	POP/SQ. MILE	2349	POP/SQ. MILE	2350	POP/SQ. MILE	2351	POP/SQ. MILE	2352	POP/SQ. MILE	2353	POP/SQ. MILE	2354	POP/SQ. MILE	2355	POP/SQ. MILE	2356	POP/SQ. MILE	2357	POP/SQ. MILE	2358	POP/SQ. MILE	2359	POP/SQ. MILE	2360	POP/SQ. MILE	2361	POP/SQ. MILE	2362	POP/SQ. MILE	2363	POP/SQ. MILE	2364	POP/SQ. MILE	2365	POP/SQ. MILE	2366	POP/SQ. MILE	2367	POP/SQ. MILE	2368	POP/SQ. MILE	2369	POP/SQ. MILE	2370	POP/SQ. MILE	2371	POP/SQ. MILE	2372	POP/SQ. MILE	2373	POP/SQ. MILE	2374	POP/SQ. MILE	2375	POP/SQ. MILE	2376	POP/SQ. MILE	2377	POP/SQ. MILE	2378	POP/SQ. MILE	2379	POP/SQ. MILE	2380	POP/SQ. MILE	2381	POP/SQ. MILE	2382	POP/SQ. MILE	2383	POP/SQ. MILE	2384	POP/SQ. MILE	2385	POP/SQ. MILE	2386	POP/SQ. MILE	2387	POP/SQ. MILE	2388	POP/SQ. MILE	2389	POP/SQ. MILE	2390	POP/SQ. MILE	2391	POP/SQ. MILE	2392	POP/SQ. MILE	2393	POP/SQ. MILE	2394	POP/SQ. MILE	2395	POP/SQ. MILE	2396	POP/SQ. MILE	2397	POP/SQ. MILE	2398	POP/SQ. MILE	2399	POP/SQ. MILE	2400	POP/SQ. MILE	2401	POP/SQ. MILE	2402	POP/SQ. MILE	2403	POP/SQ. MILE	2404	POP/SQ. MILE	2405	POP/SQ. MILE	2406	POP/SQ. MILE	2407	POP/SQ. MILE	2408	POP/SQ. MILE	2409	POP/SQ. MILE	2410	POP/SQ. MILE	2411	POP/SQ. MILE	2412	POP/SQ. MILE	2413	POP/SQ. MILE	2414	POP/SQ. MILE	2415	POP/SQ. MILE	2416	POP/SQ. MILE	2417	POP/SQ. MILE	2418	POP/SQ. MILE	2419	POP/SQ. MILE	2420	POP/SQ. MILE	2421	POP/SQ. MILE	2422	POP/SQ. MILE	2423	POP/SQ. MILE	2424	POP/SQ. MILE	2425	POP/SQ. MILE	2426	POP/SQ. MILE	2427	POP/SQ. MILE	2428	POP/SQ. MILE	2429	POP/SQ. MILE	2430	POP/SQ. MILE	2431	POP/SQ. MILE	2432	POP/SQ. MILE	2433	POP/SQ. MILE	2434	POP/SQ. MILE	2435	POP/SQ. MILE	2436	POP/SQ. MILE	2437	POP/SQ. MILE	2438	POP/SQ. MILE	2439	POP/SQ. MILE	2440	POP/SQ. MILE	2441	POP/SQ. MILE	2442	POP/SQ. MILE	2443	POP/SQ. MILE	2444	POP/SQ. MILE	2445	POP/SQ. MILE	2446	POP/SQ. MILE	2447	POP/SQ. MILE	2448	POP/SQ. MILE	2449	POP/SQ. MILE	2450	POP/SQ. MILE	2451	POP/SQ. MILE	2452	POP/SQ. MILE	2453	POP/SQ. MILE	2454	POP/SQ. MILE	2455	POP/SQ. MILE	2456	POP/SQ. MILE	2457	POP/SQ. MILE	2458	POP/SQ. MILE	2459	POP/SQ. MILE	2460	POP/SQ. MILE	2461	POP/SQ. MILE	2462	POP/SQ. MILE	2463	POP/SQ. MILE	2464	POP/SQ. MILE	2465	POP/SQ. MILE	2466	POP/SQ. MILE	2467	POP/SQ. MILE	2468	POP/SQ. MILE	2469	POP/SQ. MILE	2470	POP/SQ. MILE	2471	POP/SQ. MILE	2472	POP/SQ. MILE	2473	POP/SQ. MILE	2474	POP/SQ. MILE	2475	POP/SQ. MILE	2476	POP/SQ. MILE	2477	POP/SQ. MILE	2478	POP/SQ. MILE	2479	POP/SQ. MILE	2480	POP/SQ. MILE	2481	POP/SQ. MILE	2482	POP/SQ. MILE	2483	POP/SQ. MILE	2484	POP/SQ. MILE	2485	POP/SQ. MILE	2486	POP/SQ. MILE	2487	POP/SQ. MILE	2488	POP/SQ. MILE	2489	POP/SQ. MILE	2490	POP/SQ. MILE	2491	POP/SQ. MILE	2492	POP/SQ. MILE	2493	POP/SQ. MILE	2494	POP/SQ. MILE	2495	POP/SQ. MILE	2496	POP/SQ. MILE	2497	POP/SQ. MILE	2498	POP/SQ. MILE	2499	POP/SQ. MILE	2500	POP/SQ. MILE	2501	POP/SQ. MILE	2502	POP/SQ. MILE	2503	POP/SQ. MILE	2504	POP/SQ. MILE	2505	POP/SQ. MILE	2506	POP/SQ. MILE	2507	POP/SQ. MILE	2508	POP/SQ. MILE	2509	POP/SQ. MILE	2510	POP/SQ. MILE	2511	POP/SQ. MILE	2512	POP/SQ. MILE	2513	POP/SQ. MILE	2514	POP/SQ. MILE	2515	POP/SQ. MILE	2516	POP/SQ. MILE	2517	POP/SQ. MILE	2518	POP/SQ. MILE	2519	POP/SQ. MILE	2520	POP/SQ. MILE	2521	POP/SQ. MILE	2522	POP/SQ. MILE	2523	POP/SQ. MILE	2524	POP/SQ. MILE	2525	POP/SQ. MILE	2526	POP/SQ. MILE	2527	POP/SQ. MILE	2528	POP/SQ. MILE	2529	POP/SQ. MILE	2530	POP/SQ. MILE	2531	POP/SQ. MILE	2532	POP/SQ. MILE	2533	POP/SQ. MILE	2534	POP/SQ. MILE	2535	POP/SQ. MILE	2536	POP/SQ. MILE	2537	POP/SQ. MILE	2538	POP/SQ. MILE	2539	POP/SQ. MILE	2540	POP/SQ. MILE	2541	POP/SQ. MILE	2542	POP/SQ. MILE	2543	POP/SQ. MILE	2544	POP/SQ. MILE	2545	POP/SQ. MILE	2546	POP

CITY CHARACTERISTICS

CODE

STATE	NEW MEXICO
1950 RANK BY POPULATION	112
1950 POP/SQ. MILE	2021
1970 POP/SQ. MILE	2965
1949 MED. FAM. INCOME	3451
1969 MED. FAM. INCOME	9641
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	33
JULY MEAN TEMPERATURE	79
MEAN ANNUAL PRECIPITATION	8
LAND RESOURCE REGION	D
WATER SOURCE	GROUND
TOTAL HARDNESS	112 PPM
NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, OPTIMUM NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

[illegible]

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE		1949-50	1959-61	1969-71
TOTAL	OBSERVED	425.0	706.0	980.0
	EXPECTED*	321.9	755.6	1049.7
	OBS/EXP	1.320	0.934	0.934
CV-CV-RNAL	OBSERVED	138.0	254.0	399.0
	EXPECTED*	152.8	389.0	588.4
	OBS/EXP	0.903	0.653	0.678
HEART	OBSERVED	87.0	177.0	267.0
	EXPECTED*	110.9	280.0	415.2
	OBS/EXP	0.785	0.632	0.643
NON CV-R	OBSERVED	287.0	452.0	581.0
	EXPECTED*	169.1	366.6	461.3
	OBS/EXP	1.697	1.233	1.259
CANCER	OBSERVED	38.0	124.0	167.0
	EXPECTED*	50.9	121.1	163.8
	OBS/EXP	0.747	1.024	1.019

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	1959	1960	1961	59-61 SUM
TOTAL	212	213	230	224	252	706
CV-RENAL	68	70	79	75	100	254
HEART	46	41	52	58	67	177
NON CV-R	164	113	151	149	152	452
CANCER	21	17	36	41	47	124

CITY CHARACTERISTICS

STATE	NEW MEXICO
1950 BANK BY POPULATION	436
1950 POP/AC. MILE	1033
1950 POP/AC. MILE	1000
1950 POP/AC. MILE	1400
1949 MED. FAL. INCOME	2964
1949 MED. FAL. INCOME	8370
URBAN CLASS	INDEPENDENT
1950 URBAN AREA BANK	-
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	69
MEAN ANN. PRECIPITATION	14
LAND RESOURCE REGION	E
WATER SOURCE	GROUND AND 9
TOTAL HARDNESS	30 PPM
NON-CARBONATE HARDNESS	5 PPM
FLUORIDATION STATUS	FLUORIDATED

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
1+ 1	1123	1066	78	69	1165	1147	204	180	715	604	206	170
1-4	4591	4370	309	272	4241	3984	717	708	2466	2390	763	815
5-9	4719	4226	217	225	4484	4313	706	689	3154	3236	962	917
10-14	3633	3357	196	219	4383	4358	543	537	3548	3398	908	796
15-19	3543	4512	188	241	3562	4932	316	409	4637	5545	657	765
20-24	4287	5283	287	283	3081	4281	302	474	4076	6598	562	790
25-29	4616	5055	268	311	3180	4281	302	474	3052	2981	480	638
30-34	4309	4841	221	296	3287	3341	392	462	1890	2060	449	517
35-39	4519	5271	241	284	3213	3692	333	376	1893	2000	373	410
40-44	4711	4981	227	206	3378	4034	307	342	2307	2576	345	433
45-49	4553	4757	234	205	3606	4258	277	305	2518	3040	320	344
50-54	4417	4646	172	121	3782	4480	237	220	2756	3340	279	322
55-59	3835	4124	97	82	3589	4182	218	187	2815	3562	218	277
60-64	3393	3619	67	63	3330	3808	135	128	2704	3650	193	212
65-69	2506	2993	65	64	2904	3508	93	84	2187	3141	180	186
70-74	1608	2198	28	41	2091	2871	53	57	1769	2765	88	105
75-79*	1369	2081	17	26	1099	1738	43	44	1296	2181	54	67
80-84*	0	0	0	0	525	1015	11	25	664	1229	34	32
85-UP	158	384	7	4	288	585	11	9	381	827	24	39
TOTALS	61350	67764	2869	3012	55188	63566	5263	5709	45728	55123	7095	7835
GRAND TOTAL				134955				129726				115781

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIO
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBSERVED	EXPECTED*
TOTAL	3799.0	5706.0	1.398	1.221	5157.0	4764.2
CV-RENAL	2280.0	3473.0	1.501	1.296	2794.0	2866.5
HEART	1701.0	2737.0	1.558	1.438	2140.0	1991.3
NON CV-R	1519.0	2233.0	1.267	1.120	2363.0	1897.7
CANCER	551.0	875.0	1.207	1.157	925.0	727.1

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	1928	1871	3799	5706	1735	1777	1645	5157
CV-RENAL	1164	1116	2280	3473	943	956	998	2794
HEART	882	819	1701	2737	734	708	698	2140
NON CV-R	764	755	1519	2233	792	821	750	2363
CANCER	287	264	551	875	329	316	280	925
STATE								
1950 RANK BY POPULATION								
1950 POP/SQ. MILE								
1970 POP/SQ. MILE								
1949 MED. FAM. INCOME								
1969 MED. FAM. INCOME								
URBAN CLASS								
1950 URBAN AREA RANK								
JAN MEAN TEMPERATURE								
JULY MEAN TEMPERATURE								
MEAN ANN. PRECIPITATION								
LAND RESOURCE REGION								
WATER SOURCE								
TOTAL HARDNESS								
NON-CARBONATE HARDNESS								
FLUORIDATION STATUS								

NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	284	233	5	2	209	213	4	4	172	165	3	3
1-4	1151	1098	16	12	923	884	7	9	646	646	10	8
5-9	1086	979	13	10	1295	1124	11	12	888	864	6	10
10-14	854	843	11	12	1245	1160	13	9	978	953	7	9
15-19	871	906	5	5	795	788	8	5	1080	1056	11	5
20-24	992	1147	6	10	922	642	2	5	817	943	13	11
25-29	1235	1352	8	8	592	674	3	4	627	601	5	3
30-34	1292	1384	11	4	786	868	5	10	411	481	1	4
35-39	1325	1420	8	8	953	1062	5	4	469	593	2	6
40-44	1161	1172	2	5	1053	1178	8	2	670	790	0	8
45-49	952	961	11	5	1068	1230	6	7	846	942	1	1
50-54	1003	1053	3	5	922	1007	3	5	877	1047	5	2
55-59	999	1091	3	2	744	818	3	2	893	1078	4	8
60-64	908	923	4	5	707	834	2	4	732	894	5	4
65-69	670	739	5	4	741	938	1	1	510	694	3	5
70-74	398	519	1	1	600	718	6	2	431	677	2	4
75-79#	371	497	2	0	308	432	1	2	379	563	2	0
80-84#	0	0	0	0	155	247	0	1	228	365	2	4
85-UP	56	103	0	0	71	135	0	0	125	215	0	1
TOTALS	15608	16420	114	98	13644	14952	88	88	11779	13567	82	96
GRAND TOTAL				32240				28772				25524

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	855.0	1225.0	1247.0		855.0	1225.0	1247.0		855.0	1225.0	1247.0	
	668.9	1098.8	1202.9		668.9	1098.8	1202.9		668.9	1098.8	1202.9	
	1.278	1.115	1.037		1.278	1.115	1.037		1.278	1.115	1.037	
CV-RENAL												
OBSERVED	465.0	760.0	763.0		465.0	760.0	763.0		465.0	760.0	763.0	
EXPECTED*	379.8	651.5	745.8		379.8	651.5	745.8		379.8	651.5	745.8	
OBS/EXP	1.224	1.167	1.023		1.224	1.167	1.023		1.224	1.167	1.023	
HEART												
OBSERVED	310.0	523.0	531.0		310.0	523.0	531.0		310.0	523.0	531.0	
EXPECTED*	273.5	464.6	520.6		273.5	464.6	520.6		273.5	464.6	520.6	
OBS/EXP	1.133	1.126	1.020		1.133	1.126	1.020		1.133	1.126	1.020	
NON CV-R												
OBSERVED	390.0	465.0	484.0		390.0	465.0	484.0		390.0	465.0	484.0	
EXPECTED*	289.1	447.3	457.0		289.1	447.3	457.0		289.1	447.3	457.0	
OBS/EXP	1.349	1.040	1.059		1.349	1.040	1.059		1.349	1.040	1.059	
CANCER												
OBSERVED	124.0	201.0	191.0		124.0	201.0	191.0		124.0	201.0	191.0	
EXPECTED*	112.4	181.8	186.0		112.4	181.8	186.0		112.4	181.8	186.0	
OBS/EXP	1.104	1.105	1.027		1.104	1.105	1.027		1.104	1.105	1.027	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	438	417	855		402	398	425	1225	387	431	429	1247
CV-RENAL	242	223	465		256	236	268	760	250	263	250	763
HEART	157	153	310		176	157	190	523	177	187	167	531
NON CV-R	196	194	390		146	162	157	465	137	168	179	484
CANCER	55	69	124		53	75	73	201	52	67	72	191

CITY CHARACTERISTICS

CODE

STATE	NEW YORK	
	1950 RANK BY POPULATION	374
1950 POP/SQ. MILE		5373
1970 POP/SQ. MILE		4401
1949 MED. FAM. INCOME		3684
1969 MED. FAM. INCOME		8807
URBAN CLASS		INDEPENDENT
1950 URBAN AREA RANK		-
JAN MEAN TEMPERATURE		21
JULY MEAN TEMPERATURE		72
MEAN ANN. PRECIPITATION		37
LAND RESOURCE REGION		I
WATER SOURCE		SURFACE
TOTAL HARDNESS		11 PPM
NON-CARBONATE HARDNESS		9 PPM
FLUORIDATION STATUS		UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	332	278	6	5	385	325	13	10	295	272	13	17
1-4	1428	1312	14	16	1414	1409	39	42	1038	1024	49	53
5-9	1309	1242	19	11	1610	1565	26	51	1438	1338	61	70
10-14	1068	1041	15	15	1489	1361	29	26	1528	1511	72	58
15-19	1030	1136	42	16	1014	1083	28	14	1525	1627	52	46
20-24	1260	1305	190	10	867	827	131	19	1239	1216	278	38
25-29	1495	1428	135	12	953	851	133	18	1047	807	242	29
30-34	1458	1405	98	18	1085	1040	195	26	842	702	158	21
35-39	1433	1298	84	8	1136	1111	141	16	759	736	131	22
40-44	1264	1202	50	16	1146	1215	73	12	874	932	66	20
45-49	1004	1033	29	5	1088	1117	67	14	980	1055	44	16
50-54	1019	1023	37	9	971	1025	32	9	935	1140	31	16
55-59	1002	1076	19	5	745	862	19	5	883	996	23	15
60-64	892	917	11	4	739	874	21	5	766	924	10	9
65-69	729	852	4	5	721	908	8	7	483	785	8	8
70-74	509	676	2	1	554	772	6	6	456	696	9	4
75-79*	450	689	3	3	373	556	4	2	378	598	2	1
80-84*	0	0	0	0	198	320	1	1	204	440	0	2
85-UP	59	148	0	1	91	199	1	0	116	304	2	4
TOTALS	17741	18061	758	162	16579	17420	967	283	15786	17113	1251	449
GRAND TOTAL				36722				35249				34599

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	868.0	791.5	1.097		1392.0	1289.9	1.079		1353.0	1353.0	1.000	
CV-RENAL												
OBSERVED	541.0				881.0				845.0			
EXPECTED*	455.4				757.4				819.4			
OBS/EXP	1.188				1.163				1.031			
HEART												
OBSERVED	365.0				625.0				608.0			
EXPECTED*	324.4				533.4				568.1			
OBS/EXP	1.125				1.172				1.070			
NON CV-R												
OBSERVED	327.0				511.0				508.0			
EXPECTED*	336.1				532.5				533.6			
OBS/EXP	0.973				0.960				0.952			
CANCER												
OBSERVED	126.0				208.0				211.0			
EXPECTED*	127.7				200.3				200.8			
OBS/EXP	0.986				1.038				1.051			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	
	NEW YORK	
STATE	1650	RANK BY POPULATION 329
1950 POP./SQ. MILE	4372	
1970 POP./SQ. MILE	4070	
1949 MED. FAM. INCOME	3350	
1969 MED. FAM. INCOME	9232	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	25	
JAN MEAN TEMPERATURE	71	
JULY MEAN TEMPERATURE	35	
MEAN ANN. PRECIPITATION	L	
LAND RESOURCE REGION	1	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	127 PPM	
NON-CARBONATE HARDNESS	20 PPM	
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT 1	769	689	12	31
1-4	3058	2905	24	7
5-9	2803	2703	26	27
10-14	2407	2370	34	33
15-19	2215	2638	35	29
20-24	2463	3144	38	27
25-29	2919	3252	36	23
30-34	2797	3236	28	28
35-39	2909	3023	31	24
40-44	2710	2883	27	34
45-49	2421	2666	37	39
50-54	2430	2620	34	24
55-59	2334	2474	24	22
60-64	2039	2196	14	14
65-69	1485	1805	15	15
70-74	1056	1361	16	11
75-79	1082	1495	10	13
80-84		0	0	0
85-UP	163	288	3	4
TOTALS	38060	41782	424	408
GRAND TOTAL				80674

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CFNSUS PERIOD

CAUSE		1949-50	1959-61	1969-70
TOTAL	OBSERVED	1895.0	2953.0	2661.0
	EXPECTED*	1754.8	2875.8	2800.7
	OBS/EXP	1.080	1.027	0.950
CV-CV-REVAL	OBSERVED	1069.0	1745.0	1495.0
	EXPECTED*	1009.3	1695.6	1720.0
	OBS/EXP	1.059	1.029	0.869
HEART	OBSERVED	804.0	1242.0	1093.0
	EXPECTED*	719.4	1197.9	1196.4
	OBS/EXP	1.118	1.037	0.914
NON CV-R	OBSERVED	826.0	1208.0	1166.0
	EXPECTED*	745.6	1180.2	1080.7
	OBS/EXP	1.108	1.024	1.079
CANCER	OBSERVED	282.0	507.0	491.0
	EXPECTED*	285.7	455.1	426.0
	OBS/EXP	0.987	1.114	1.153

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	916	979	1995	960	1061	932	2953	885	869	907	2661
CV-FEMAL	490	579	1069	564	643	582	1745	489	479	527	1495
HEART	364	440	804	387	472	383	1242	368	351	374	1093
NON CV-R	426	400	826	396	418	394	1208	396	380	380	1166
CANCER	146	136	282	167	175	165	507	167	159	165	491

CITY CHARACTERISTICS	CODE
1. City population	1
2. City area	2
3. City income	3
4. City education	4
5. City employment	5
6. City housing	6
7. City transportation	7
8. City environment	8
9. City government	9
10. City culture	10
11. City history	11
12. City industry	12
13. City commerce	13
14. City recreation	14
15. City health	15
16. City safety	16
17. City quality of life	17
18. City social services	18
19. City infrastructure	19
20. City economic development	20
21. City urban planning	21
22. City public works	22
23. City public safety	23
24. City public health	24
25. City public education	25
26. City public housing	26
27. City public transportation	27
28. City public environment	28
29. City public government	29
30. City public culture	30
31. City public history	31
32. City public industry	32
33. City public commerce	33
34. City public recreation	34
35. City public health	35
36. City public safety	36
37. City public quality of life	37
38. City public social services	38
39. City public infrastructure	39
40. City public economic development	40
41. City public urban planning	41
42. City public public works	42
43. City public public safety	43
44. City public public health	44
45. City public public education	45
46. City public public housing	46
47. City public public transportation	47
48. City public public environment	48
49. City public public government	49
50. City public public culture	50
51. City public public history	51
52. City public public industry	52
53. City public public commerce	53
54. City public public recreation	54
55. City public public health	55
56. City public public safety	56
57. City public public quality of life	57
58. City public public social services	58
59. City public public infrastructure	59
60. City public public economic development	60
61. City public public urban planning	61
62. City public public public works	62
63. City public public public safety	63
64. City public public public health	64
65. City public public public education	65
66. City public public public housing	66
67. City public public public transportation	67
68. City public public public environment	68
69. City public public public government	69
70. City public public public culture	70
71. City public public public history	71
72. City public public public industry	72
73. City public public public commerce	73
74. City public public public recreation	74
75. City public public public health	75
76. City public public public safety	76
77. City public public public quality of life	77
78. City public public public social services	78
79. City public public public infrastructure	79
80. City public public public economic development	80
81. City public public public urban planning	81
82. City public public public public works	82
83. City public public public public safety	83
84. City public public public public health	84
85. City public public public public education	85
86. City public public public public housing	86
87. City public public public public transportation	87
88. City public public public public environment	88
89. City public public public public government	89
90. City public public public public culture	90
91. City public public public public history	91
92. City public public public public industry	92
93. City public public public public commerce	93
94. City public public public public recreation	94
95. City public public public public health	95
96. City public public public public safety	96
97. City public public public public quality of life	97
98. City public public public public social services	98
99. City public public public public infrastructure	99
100. City public public public public economic development	100
101. City public public public public urban planning	101
102. City public public public public public works	102
103. City public public public public public safety	103
104. City public public public public public health	104
105. City public public public public public education	105
106. City public public public public public housing	106
107. City public public public public public transportation	107
108. City public public public public public environment	108
109. City public public public public public government	109
110. City public public public public public culture	110
111. City public public public public public history	111
112. City public public public public public industry	112
113. City public public public public public commerce	113
114. City public public public public public recreation	114
115. City public public public public public health	115
116. City public public public public public safety	116
117. City public public public public public quality of life	117
118. City public public public public public social services	118
119. City public public public public public infrastructure	119
120. City public public public public public economic development	120
121. City public public public public public urban planning	121
122. City public public public public public public works	122
123. City public public public public public public safety	123
124. City public public public public public public health	124
125. City public public public public public public education	125
126. City public public public public public public housing	126
127. City public public public public public public transportation	127
128. City public public public public public public environment	128
129. City public public public public public public government	129
130. City public public public public public public culture	130
131. City public public public public public public history	131
132. City public public public public public public industry	132
133. City public public public public public public commerce	133
134. City public public public public public public recreation	134
135. City public public public public public public health	135
136. City public public public public public public safety	136
137. City public public public public public public quality of life	137
138.	

STATE	NEW YORK
1950 BANK BY POPULATION	139
1950 POP/50. MILE	7988
1970 POP/50. MILE	5829
1970 POP/50. MIF	3606
1949 FED. FAM. INCOME	9321
1969 FED. FAM. INCOME	CENTRAL
URBAN CLASS	84
1950 URBAN AREA BANK	25
JULY MEAN TEMPERATURE	71
JAN MEAN TEMPERATURE	36
MEAN ANN. PRECIPITATION	36
LAND RESOURCE REGION	GROUND AND SURFACE
WATER SOURCE	70 PPM
TOTAL HARDNESS	16 PPM
NON-CARBONATE HARDNESS	FLUORIDATED IN 1964
FLUORIDATION STATUS	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	N	M	F	N	M	F	N	M	F	N	M	F	N	M	F	N	M	F
TOTAL	4892	4657	444	436	4584	4560	1161	1152	2860	2746	1153	1115	1153	1153	1115	1153	1153	1115
1-4	19554	19552	1591	1634	17412	15907	4612	4546	10617	10061	4365	4321	10617	10061	4365	4321	10617	10061
5-9	19801	19421	1576	1635	18784	18218	4654	4683	13324	12995	6171	6182	13324	12995	6171	6182	13324	12995
10-14	16128	15808	1424	1344	17605	17237	3195	3397	14867	14601	6289	6263	14867	14601	6289	6263	14867	14601
15-19	16495	16035	1024	1292	14815	14687	2096	2457	14789	14657	4960	5270	14789	14657	4960	5270	14789	14657
20-24	17075	22278	1404	1787	12155	14422	2135	2923	14854	18237	2991	4264	14854	18237	2991	4264	14854	18237
25-29	21422	23723	1848	2086	13383	12852	2664	3239	11143	10531	2608	3444	11143	10531	2608	3444	11143	10531
30-34	20964	22227	1678	1934	13775	13934	2878	3240	7533	7665	2494	3348	7533	7665	2494	3348	7533	7665
35-39	19731	21019	1706	1825	13848	15499	2813	2813	7495	7939	2675	3422	7495	7939	2675	3422	7495	7939
40-44	17874	19552	1602	1393	14505	16020	2249	2405	10064	11980	2549	2668	10064	11980	2549	2668	10064	11980
45-49	17100	18203	1538	1252	14620	16087	1950	1944	10946	12787	2023	2341	10946	12787	2023	2341	10946	12787
50-54	17774	18742	1268	854	13378	15162	1605	1452	10619	12851	1721	1813	10619	12851	1721	1813	10619	12851
55-59	16616	16678	750	605	12938	14599	1476	1259	9043	11866	1316	1377	9043	11866	1316	1377	9043	11866
60-64	13878	13789	413	322	12080	14085	1070	901	7558	10694	1146	1171	7558	10694	1146	1171	7558	10694
65-69	9683	10741	297	304	10897	12764	623	594	6124	9765	336	401	6124	9765	336	401	6124	9765
70-74	5861	7313	119	127	7965	9709	377	341	4564	7290	169	221	4564	7290	169	221	4564	7290
75-79#	4972	7008	88	126	4287	5805	181	196	2356	4103	98	153	2356	4103	98	153	2356	4103
80-84#	0	0	0	0	1911	3018	62	87	1202	2488	46565	51836	1202	2488	46565	51836	1202	2488
85-89	703	1333	15	19	935	1738	49	59	169035	195332	462768	462768	169035	195332	462768	462768	169035	195332
TOTALS	263353	279079	18725	18975	219877	234944	35800	37588	532759	532759	532759	532759	532759	532759	532759	532759	532759	532759
GRAND TOTAL																		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DENS RATIO
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED			OBSERVED			OBSERVED		
	13244.0	20563.0	19376.0	10568.2	17547.1	17622.2	1.253	1.172	1.100
TOTAL	13244.0	20563.0	19376.0	10568.2	17547.1	17622.2	1.253	1.172	1.100
CV-RENAL	7361.0	11691.0	10664.0	5741.7	9756.6	10295.4	1.282	1.198	1.036
HEART	5485.0	8859.0	8026.0	4143.1	6946.1	7145.5	1.324	1.275	1.123
NON CV-R	5883.0	8872.0	8712.0	4826.5	7790.5	7326.8	1.219	1.139	1.189
CANCER	2129.0	3045.0	3323.0	1772.2	2836.6	2891.8	1.201	1.215	1.234

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED			OBSERVED			OBSERVED		
	13244.0	20563.0	19376.0	10568.2	17547.1	17622.2	1.253	1.172	1.100
TOTAL	13244.0	20563.0	19376.0	10568.2	17547.1	17622.2	1.253	1.172	1.100
CV-RENAL	7361.0	11691.0	10664.0	5741.7	9756.6	10295.4	1.282	1.198	1.036
HEART	5485.0	8859.0	8026.0	4143.1	6946.1	7145.5	1.324	1.275	1.123
NON CV-R	5883.0	8872.0	8712.0	4826.5	7790.5	7326.8	1.219	1.139	1.189
CANCER	2129.0	3045.0	3323.0	1772.2	2836.6	2891.8	1.201	1.215	1.234

FLUORIDATED IN 1955

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					1960					1970				
	WM	WF	NM	NF	SUM	WM	WF	NM	NF	SUM	WM	WF	NM	NF	SUM
LT 1	442	433	11	12	888	466	484	22	35	927	311	256	26	41	594
1-4	1934	1849	50	53	3886	1848	1737	117	108	3773	1115	1099	109	112	3333
5-9	1745	1749	35	56	3585	1990	2009	114	133	4246	1626	1537	208	186	3557
10-14	1495	1425	47	49	3076	1878	1785	84	101	3848	1666	1716	152	158	3692
15-19	1572	1700	234	49	3555	1601	1921	242	74	3848	1785	2254	366	139	4544
20-24	1908	1914	389	57	3668	1403	1431	287	57	3178	1437	1866	429	103	3835
25-29	1864	1974	147	49	3994	1262	1087	224	78	2551	1029	976	164	79	2248
30-34	1637	1908	54	53	3648	1145	1240	93	78	2656	767	759	64	59	2650
35-39	1541	1689	57	48	3335	1256	1420	79	67	2922	682	798	64	82	2636
40-44	1415	1560	43	47	3065	1220	1462	53	64	2739	846	982	67	85	2980
45-49	1399	1559	32	32	2922	1158	1344	53	43	2698	921	1119	66	62	3068
50-54	1022	1517	32	27	2638	1162	1246	37	52	2597	954	1057	45	68	3024
55-59	1278	1471	30	22	2701	1047	1228	30	36	2343	805	1057	38	50	2996
60-64	1180	1301	21	16	2517	981	1248	27	28	2236	784	988	24	23	2819
65-69	842	1109	19	5	1975	988	1195	26	20	2229	615	984	11	22	2732
70-74	542	827	8	5	1382	711	1024	16	14	1741	325	932	12	18	1377
75-79*	554	855	7	11	1427	420	731	5	4	1160	373	732	9	16	1120
80-84*	0	0	0	0	0	201	410	6	4	617	207	517	10	4	738
85-89*	98	197	1	3	296	106	267	2	10	375	113	323	0	4	436
TOTALS	22868	25037	1217	594	30689	20723	23269	1517	1008	45537	16582	20112	1902	1349	39945
GRAND TOTAL				49716					46517						

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1246.0	1022.2	1.219	1915.0	1648.0	1.162	1796.0	1539.1	1.167
CV-RENAL	729.0	582.4	1.252	1190.0	961.6	1.238	989.0	933.0	1.060
HEART	465.0	413.7	1.124	769.0	675.9	1.138	655.0	644.7	1.016
NON CV-R	517.0	439.9	1.175	725.0	686.4	1.056	807.0	606.1	1.331
CANCER	202.0	164.7	1.227	291.0	229.2	1.136	333.0	256.1	1.453

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS				
	1949	1950	1959	1961	59-61 SUM	1970	1971	69-71 SUM	CODE	NEW YORK
TOTAL	627	619	635	646	1915	629	588	1796	STATE	234
CV-RENAL	347	382	398	408	1190	340	310	989	1950 RANK BY POPULATION	7102
HEART	222	243	258	265	769	228	208	655	1950 POP/SQ. MILE	5472
NON CV-R	280	237	237	238	725	240	278	807	1970 POP/SQ. MILE	3320
CANCER	108	94	97	91	291	114	117	333	1949 MED. FAM. INCOME	8353
									1969 MED. FAM. INCOME	INDEPENDENT
									URBAN CLASS	26
									1950 URBAN AREA RANK	71
									JAN MEAN TEMPERATURE	33
									JULY MEAN TEMPERATURE	71
									MEAN ANNUAL PRECIPITATION	33
									MEAN ANNUAL HUMIDITY	71
									WATER RESERVE REGION	33
									TOTAL SURFACE	92 RPM
									TOTAL HARDNESS	33 RPM
									NON-CARBONATE HARDNESS	33 RPM
									FLUORIDATION STATUS	FLUORIDATED IN 1953

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	226	236	32	30	226	215	110	100	191	226	146	156
1-4	1068	1063	95	96	855	858	397	454	668	657	704	704
5-9	1052	964	96	84	1073	1028	415	390	862	755	1007	939
10-14	764	718	85	90	1078	1067	321	308	829	829	780	793
15-19	726	698	75	93	752	839	230	269	841	822	626	656
20-24	804	977	107	118	603	726	293	466	1029	1444	399	700
25-29	1004	1185	119	171	778	718	294	381	1104	891	420	676
30-34	1063	1180	116	157	807	890	276	404	592	577	401	597
35-39	1025	1209	122	154	946	1029	272	327	592	573	381	540
40-44	1057	1062	130	115	908	1028	287	337	680	709	429	561
45-49	910	979	92	75	943	1076	197	236	678	853	366	434
50-54	906	989	78	56	984	1029	174	183	703	847	302	369
55-59	696	768	49	36	849	923	109	127	702	941	213	301
60-64	575	611	30	33	742	883	78	100	685	819	179	201
65-69	354	438	16	20	534	729	47	54	482	733	104	125
70-74	242	330	14	8	354	504	14	47	410	659	51	114
75-79*	212	346	1	5	192	300	10	14	256	545	30	54
80-84*	0	0	0	0	96	176	6	12	143	282	10	25
85-UP	27	71	1	1	51	98	8	7	87	209	19	18
TOTALS	12711	13824	1258	1342	12771	14116	3538	4216	11534	13371	6567	7939
GRAND TOTAL				29135				34641				39411

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	565.0	493.3	1.145		565.0	493.3	1.145		565.0	493.3	1.145	
CV-RENAL												
OBSERVED												
EXPECTED*												
OBS/EXP												
HEART												
OBSERVED												
EXPECTED*												
OBS/EXP												
NON CV-R												
OBSERVED												
EXPECTED*												
OBS/EXP												

CANCER

OBSERVED	81.9	169.2	205.7
EXPECTED*			
OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	1959	1960	1961	1969	1970	1971	STATE	1950 RANK BY POPULATION	NEW YORK	
TOTAL	291	274	334	392	418	468	485	502	1950 RANK BY POPULATION	420		
CV-RENAL									1950 RANK BY POPULATION	420		
HEART									1950 RANK BY POPULATION	420		
NON CV-R									1950 RANK BY POPULATION	420		
CANCER									1950 RANK BY POPULATION	420		

NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	225	228	16	8	242	222	13	14	175	121	27	26
1-4	837	830	23	23	758	786	28	56	477	436	60	69
5-9	702	680	22	30	676	790	59	67	518	503	78	67
10-14	527	502	31	28	712	689	61	43	565	578	52	66
15-19	2309	1556	39	29	3090	1913	42	36	2918	1638	132	100
20-24	3656	1947	72	47	3543	1787	90	57	4100	2475	231	162
25-29	1755	1169	72	37	1135	812	108	54	1040	754	164	107
30-34	836	853	39	30	640	598	94	65	466	394	73	54
35-39	684	799	31	39	567	610	70	40	390	349	44	44
40-44	654	740	38	36	484	628	25	41	363	414	46	36
45-49	568	662	46	36	554	603	36	38	414	464	34	35
50-54	510	627	30	28	499	603	27	30	336	473	15	25
55-59	489	608	21	22	467	554	31	29	380	459	30	26
60-64	411	560	18	13	384	514	21	26	344	486	22	24
65-69	349	505	12	17	333	506	16	28	262	401	16	35
70-74	270	407	11	11	256	439	8	16	208	352	20	19
75-79*	265	422	6	5	167	330	9	8	146	293	4	7
80-84*	0	0	0	0	88	210	3	6	141	222	7	8
85-UP	51	79	3	6	61	113	1	0	59	166	6	7
TOTALS	15098	13174	540	445	14656	12747	742	654	13262	10988	1060	916
GRAND TOTAL				29257				28799				26226

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	504.0	828.0	711.0	489.4	765.1	730.9	489.4	765.1	730.9
	1.030	1.082	0.973						
CV-RENAL	307.0	539.0	409.0	269.8	422.9	0.967			
	1.138	1.255							
HEART	209.0	387.0	291.0	189.5	299.2	1.605			
	1.103	1.294							
NON CV-R	197.0	289.0	302.0	219.7	335.5	308.0			
	0.897	0.861	0.981						
CANCER	80.0	112.0	141.0	75.5	114.7	102.7			
	1.060	0.977	1.372						

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	NEW YORK	
	STATE	1950 RANK BY POPULATION
	417	5418
	1950 POP/SQ. MILE	4683
	1970 POP/SQ. MILE	3252
	1949 MED. FAM. INCOME	9508
	1969 MED. FAM. INCOME	INDEPENDENT
	URBAN CLASS	
	1950 URBAN AREA RANK	23
	JAN MEAN TEMPERATURE	70
	JULY MEAN TEMPERATURE	75
	MEAN ANN. PRECIPITATION	35
	LAND RESOURCE REGION	WESTERN
	WATER RESOURCES	SURFACE
	FAIR WEATHER	67 BPM
	NON-CARBONATE HARDNESS	29 BPM
	FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				69-71			
	1949	1950	1959	1961	1969	1970	1971	SUM
TOTAL	260	244	269	274	277	218	216	711
CV-RENAL	157	150	186	172	155	124	130	409
HEART	116	93	138	118	104	93	94	291
NON CV-R	103	113	83	93	122	94	86	302
CANCER	45	35	35	39	55	41	45	141

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	394	387	3	7	428	381	18	16	365	330	8	14
1-4	1653	1518	27	18	1568	1562	48	33	1337	1214	45	44
5-9	1467	1411	20	35	1841	1742	53	53	1698	1673	58	31
10-14	1152	1161	28	20	1640	1617	48	40	1667	1597	53	46
15-19	1194	1279	14	16	1101	1632	22	45	1600	1632	45	47
20-24	1205	1671	14	17	879	1131	27	25	1191	1582	19	25
25-29	1455	1657	21	22	1095	1164	18	36	1115	1236	34	39
30-34	1469	1639	34	23	1189	1282	28	23	868	892	23	22
35-39	1426	1499	23	26	1153	1270	31	25	841	919	20	30
40-44	1462	1629	13	18	1162	1361	31	36	1016	1155	26	24
45-49	1422	1479	25	10	1232	1342	22	18	1032	1116	31	20
50-54	1427	1511	17	15	1241	1399	22	16	1022	1199	33	24
55-59	1284	1387	12	17	1219	1295	19	12	1020	1171	21	17
60-64	1152	1207	10	9	1097	1270	12	11	993	1162	8	16
65-69	929	1014	6	7	912	1143	7	11	803	1072	15	15
70-74	646	824	7	3	761	959	8	9	663	1000	6	9
75-79*	670	835	2	2	518	663	3	6	487	800	7	10
80-84*	0	0	0	0	262	408	2	1	313	525	2	5
85-UP	113	162	0	0	145	233	1	3	201	391	2	3
TOTALS	20520	22293	276	265	19443	21536	420	419	18232	20666	456	441
GRAND TOTAL				43354				41818				39795

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*
TOTAL	1007.0	1024.9	1734.0	1665.9	1682.0	1783.3
		0.983		1.041		0.943
CV-RENAL	594.0	597.6	1120.0	990.7	1054.0	1102.8
		0.994		1.131		0.956
HEART	411.0	425.4	751.0	698.7	766.0	763.5
		0.966		1.073		1.003
NON CV-R	413.0	427.3	614.0	675.2	628.0	680.5
		0.967		0.909		0.923
CANCER	156.0	165.9	270.0	263.2	242.0	263.5
		0.940		1.026		0.918

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CODE			
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	488	519	1007	598	571	527	551	1682
CV-RENAL	291	303	594	380	367	309	353	1054
HEART	202	209	411	248	256	227	250	766
NON CV-R	197	216	413	218	204	218	198	628
CANCER	69	87	156	97	92	79	80	242
STATE	NEW YORK				274			
1950 RANK BY POPULATION	274				4564			
1950 POP/SQ. MILE	4564				4189			
1970 POP/SQ. MILE	4189				3463			
1949 MED. FAM. INCOME	3463				8624			
1969 MED. FAM. INCOME	8624				INDEPENDENT			
URBAN CLASS	INDEPENDENT				-			
1950 URBAN AREA RANK	-				25			
JAN MEAN TEMPERATURE	25				71			
JULY MEAN TEMPERATURE	71				43			
MEAN ANN. PRECIPITATION	43				R			
LAND RESOURCE REGION	R				GROUND			
WATER SOURCE	GROUND				103 PPM			
TOTAL HARDNESS	103 PPM				21 PPM			
NON-CARBONATE HARDNESS	21 PPM				FLUORIDATED IN 1963			
FLUORIDATION STATUS	FLUORIDATED IN 1963							

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	237	217	9	9	278	276	20	15	155	170	26	27
1-4	931	972	39	37	1047	963	71	64	637	593	104	96
5-9	979	932	36	40	1180	1171	66	72	907	904	137	114
10-14	875	851	38	42	1070	1073	66	61	1071	945	133	107
15-19	761	926	31	38	792	906	44	61	945	957	89	91
20-24	829	1032	28	32	672	790	35	43	690	909	74	82
25-29	956	1103	23	41	763	743	32	42	664	626	49	59
30-34	871	960	14	16	823	858	40	43	494	476	62	62
35-39	975	1077	31	41	956	948	38	42	486	570	45	57
40-44	954	1058	31	32	776	832	23	34	618	596	43	45
45-49	924	986	41	29	883	983	34	45	654	676	43	40
50-54	840	975	25	31	925	953	37	34	579	611	34	29
55-59	915	835	12	17	915	843	31	34	579	611	34	29
60-64	905	835	11	18	657	830	27	31	612	755	26	43
65-69	581	734	19	9	663	831	27	26	529	756	33	32
70-74	393	576	8	3	491	733	13	12	405	709	31	30
75-79*	407	656	8	6	305	489	7	5	292	567	15	13
80-84*	0	0	0	0	168	295	6	4	174	419	3	7
85-UP	59	141	0	3	90	237	3	5	107	310	7	6
TOTALS	13012	14946	416	443	13086	14873	628	673	10769	12812	978	985
GRAND TOTAL				28617				29260				25548

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL												
	812.0	1276.0			812.0	1276.0			812.0	1276.0		
	682.2	1199.7			682.2	1199.7			682.2	1199.7		
	1.190	1.064			1.190	1.064			1.190	1.064		
CV-RENAL												
	472.0	788.0			472.0	788.0			472.0	788.0		
	400.6	715.0			400.6	715.0			400.6	715.0		
	1.178	1.056			1.178	1.056			1.178	1.056		
HEART												
	322.0	543.0			322.0	543.0			322.0	543.0		
	282.9	528.4			282.9	528.4			282.9	528.4		
	1.138	1.080			1.138	1.080			1.138	1.080		
NON CV-R												
	340.0	488.0			340.0	488.0			340.0	488.0		
	281.5	480.7			281.5	480.7			281.5	480.7		
	1.208	1.015			1.208	1.015			1.208	1.015		
CANCER												
	136.0	208.0			136.0	208.0			136.0	208.0		
	109.5	185.1			109.5	185.1			109.5	185.1		
	1.242	1.124			1.242	1.124			1.242	1.124		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	394	418	812		453	420	403	1276	408	418	405	1231
CV-RENAL	233	239	472		280	259	249	788	225	240	233	698
HEART	166	156	322		188	184	171	543	150	171	165	486
NON CV-R	161	179	340		173	161	154	488	183	178	172	533
CANCER	56	80	136		64	81	63	208	78	66	90	234
CITY CHARACTERISTICS												
STATE												
1950 RANK BY POPULATION												NEW YORK
1950 POP/SG. MILE												426
1970 POP/SG. MILE												3894
1949 MED. FAR. INCOME												3317
1969 MED. FAR. INCOME												3212
URBAN CLASS AREA RANK												8978
1950 URBAN AREA RANK												INDEPENDENT
JULY MEAN TEMPERATURE												27
JULY MEAN PRECIPITATION												72
LAND ANNU. PRECIPITATION												40
LAND RESOURCE REGION												R
WATER SOURCE												SURFACE
TOTAL HARDNESS												20 PPM
NON-CARBONATE HARDNESS												10 PPM
FLUORIDATION STATUS												NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	NF
LT 1	227	222	2	2	299	329	11	12	229	213	17	6						
1-4	1083	925	8	13	1114	1105	45	38	813	815	52	51						
5-9	938	960	16	15	1174	1104	33	50	1156	1141	79	63						
10-14	801	767	12	12	1164	1034	25	26	1145	1173	66	67						
15-19	727	817	10	8	769	905	29	19	960	965	32	44						
20-24	810	883	9	14	739	784	17	15	835	980	31	49						
25-29	919	1001	6	8	829	748	26	26	757	759	38	38						
30-34	903	966	12	8	770	756	27	20	619	604	25	29						
35-39	877	913	14	7	746	895	17	22	598	591	18	26						
40-44	789	871	4	7	797	863	20	16	633	661	18	20						
45-49	745	778	7	3	708	847	11	11	668	834	21	13						
50-54	753	766	8	4	708	96	10	13	668	834	21	13						
55-59	663	729	7	3	643	629	5	5	619	727	13	13						
60-64	605	641	3	7	605	653	5	2	513	767	9	14						
65-69	460	556	6	6	485	613	9	5	418	509	5	3						
70-74	332	424	3	3	395	525	3	4	322	509	7	8						
75-79	341	480	1	1	242	372	3	6	247	468	3	5						
80-84	93	112	0	0	137	214	0	2	142	277	0	2						
85-89	93	112	0	1	84	175	1	1	87	212	1	1						
TOTALS	12072	12811	128	122	12455	13397	299	292	11479	12975	471	474						
GRAND TOTAL				25133				26443				25399						

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 612.0 EXPECTED* 568.6 OBS/EXP 1.076	977.0 943.3 1.036	1033.0 964.5 1.071
CV-RENAL	OBSERVED 369.0 EXPECTED* 324.8 OBS/EXP 1.109	584.0 551.3 1.059	559.0 581.8 0.961
HEART	OBSERVED 263.0 EXPECTED* 235.1 OBS/EXP 1.119	423.0 387.2 1.092	411.0 404.1 1.017
NON CV-R	OBSERVED 243.0 EXPECTED* 235.8 OBS/EXP 1.031	393.0 392.0 1.003	474.0 382.8 1.238
CANCER	OBSERVED 98.0 EXPECTED* 89.5 OBS/EXP 1.095	161.0 144.2 1.117	195.0 144.6 1.348

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS						CODE					
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS
TOTAL	296	316	612	328	323	326	977	358	347	328	1033	NEW YORK	479	3540	3175	3353	10617	INDEPENDENT
CV-RENAL	172	197	369	199	186	199	584	203	182	174	559							
HEART	114	149	263	142	137	144	423	155	127	129	474							
NON CV-R	124	119	243	129	137	127	393	155	165	154	474							
CANCER	48	50	98	51	59	51	161	65	63	67	195							
												JAN MEAN TEMPERATURE	1950 URBAN AREA RANK					
												24						
												70						
												JULY MEAN TEMPERATURE						
												31						
												MEAN ANNUAL PRECIPITATION						
												1						
												LAND RESOURCE REGION						
												1						
												WATER SOURCE						
												126 SPM						
												TOTAL HARDNESS						
												38 SPM						
												NON-CARBONATE HARDNESS						
												FLUORIDATION STATUS						
												FLUORIDATED IN 1959						

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	531	544	72	61	563	547	186	160	333	276	264	286
1-4	2300	2152	339	349	2112	1984	697	745	1169	1143	1066	1039
5-9	2357	2273	281	276	2232	2158	744	751	1542	1425	1368	1410
10-14	1961	1845	251	264	2323	2159	617	641	1710	1586	1235	1315
15-19	1968	1845	251	264	2323	2159	617	641	1710	1586	1235	1315
20-24	1968	1845	251	264	2323	2159	617	641	1710	1586	1235	1315
25-29	2360	2267	360	350	1764	1704	430	504	1610	1624	1053	1040
30-34	2360	2267	360	350	1764	1704	430	504	1610	1624	1053	1040
35-39	2175	2090	312	497	1720	1933	438	694	1528	1380	810	1214
40-44	2272	2780	311	497	1965	2053	472	750	1306	1085	813	1157
45-49	2440	2702	313	377	1812	2131	548	701	1019	1120	776	944
50-54	2295	2550	253	308	1779	2173	498	692	1318	1476	730	993
55-59	2230	2383	182	139	2090	2587	411	607	1828	1668	691	933
60-64	1852	1792	128	119	2184	2409	394	464	1480	1847	614	873
65-69	1432	1558	80	105	1991	2239	307	353	1634	1951	483	661
70-74	1035	1307	36	48	1726	1841	205	248	1598	1735	400	568
75-79*	715	967	36	48	1284	1552	129	208	995	1697	290	434
80-84*	634	1662	16	31	859	1204	85	135	787	1272	162	261
85-89*	0	0	0	0	551	769	59	79	529	852	85	165
TOTALS	30451	33519	3471	4458	28847	32052	6759	8352	21665	24699	11853	14561
GRAND TOTAL				71899				76010				72778

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL				TOTAL				TOTAL			
CV-RENAL	OBSERVED				OBSERVED				OBSERVED			
	EXPECTED*				EXPECTED*				EXPECTED*			
	OBS/EXP				OBS/EXP				OBS/EXP			
HEART	OBSERVED				OBSERVED				OBSERVED			
	EXPECTED*				EXPECTED*				EXPECTED*			
	OBS/EXP				OBS/EXP				OBS/EXP			
NON CV-R	OBSERVED				OBSERVED				OBSERVED			
	EXPECTED*				EXPECTED*				EXPECTED*			
	OBS/EXP				OBS/EXP				OBS/EXP			
CANCER	OBSERVED				OBSERVED				OBSERVED			
	EXPECTED*				EXPECTED*				EXPECTED*			
	OBS/EXP				OBS/EXP				OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 RANK BY POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLOUORIDATION STRIUS	NEW YORK
STATE	162	17536	16925	4095	10973	FRINGE	1	32	76	43	R	SURFACE	21 PPM	21 PPM	FLUORIDATED IN 1965	162

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	MF	NM	MF	WM	WF	NM	MF	WM	WF	NM	MF	NM	MF	NM	MF
LT 1	255	267	34	25	270	250	103	111	111	125	136	125	111	100	100	100	100	100
1-4	1038	1094	94	106	965	899	374	366	452	481	515	481	452	487	487	487	487	487
5-9	994	956	80	86	946	975	305	322	322	609	685	609	322	653	653	653	653	653
10-14	857	830	81	86	946	1055	231	246	492	537	714	690	492	537	537	537	537	537
15-19	802	882	72	81	717	906	187	216	311	360	605	889	311	360	360	360	360	360
20-24	868	1164	79	97	647	923	225	269	269	353	551	810	269	353	353	353	353	353
25-29	1098	1188	86	102	1098	1444	226	289	289	356	459	489	279	356	356	356	356	356
30-34	1108	1207	82	182	754	736	212	194	194	280	363	379	252	280	280	280	280	280
35-39	1156	1131	97	100	794	849	153	130	130	214	327	353	214	280	280	280	280	280
40-44	1062	1145	73	82	701	893	108	100	100	159	248	279	159	159	159	159	159	159
45-49	985	1065	66	56	833	919	87	71	71	138	214	248	138	138	138	138	138	138
50-54	985	918	38	23	746	881	67	64	64	102	136	169	102	102	102	102	102	102
55-59	845	918	25	22	703	738	52	56	56	88	114	136	88	88	88	88	88	88
60-64	738	801	25	13	595	758	25	28	28	60	544	695	60	60	60	60	60	60
65-69	424	592	19	11	425	583	15	20	20	39	406	650	39	39	39	39	39	39
70-74	424	592	11	11	258	383	9	4	4	16	370	532	16	16	16	16	16	16
75-79	361	563	0	0	137	258	7	4	4	15	232	396	13	15	15	15	15	15
80-84	0	0	0	0	77	142	4	8	8	2	183	276	8	2	2	2	2	2
85-UP	53	115	3	3	12097	13733	2522	2627	2627	4190	8236	10113	3680	26219	26219	26219	26219	26219
TOTALS	14206	15706	1013	1031	12097	13733	2522	2627	2627	4190	8236	10113	3680	26219	26219	26219	26219	26219
GRAND TOTAL				31956				30979										

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	926.0	1485.0	1.439	926.0	1485.0	1.439	926.0	1485.0	1.439
CV-RENAL	567.0	967.0	1.449	567.0	967.0	1.449	567.0	967.0	1.449
HEART	372.0	600.0	1.612	372.0	600.0	1.612	372.0	600.0	1.612
NON CV-R	359.0	618.0	1.724	359.0	618.0	1.724	359.0	618.0	1.724
CANCER	141.0	271.0	1.922	141.0	271.0	1.922	141.0	271.0	1.922

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	NEW YORK	
TOTAL	441	485	480	469	536	1485	475	498	525	1498	STATE	378
CV-RENAL	284	283	279	287	301	867	288	308	286	882	1950 POP/50. MILE	8637
HEART	187	185	182	200	218	600	219	241	217	677	1970 POP/50. MILE	6723
NON CV-R	157	202	201	182	235	618	187	190	239	616	1949 MED. FAM. INCOME	3324
CANCER	57	84	86	81	104	271	71	75	103	249	1969 MED. FAM. INCOME	7748
											URBAN CLASS	INDEPENDENT
											1950 URBAN AREA RANK	24
											JAN. HEAT. DEGREE	73
											JULY MIN. TEMPERATURE	4
											MEAN ANN. PRECIPITATION	7
											LAND RESOURCE REGION	F
											WATER SOURCE	102
											TOTAL HARDNESS	102
											NON-CARBONATE HARDNESS	36
											FLUORIDATION STATUS	PPM
											FLUORIDATED IN 1945	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970						CAUSE	1949-50	1959-61	1969-71
	WM			NM			WM			NM			WM			NM						
	WF	NP	NP	WF	NP	NP	WF	NP	NP	WF	NP	NP	WF	NP	NP	WF	NP	NP				
TOTAL	24501	27723	3206	4295	59725		31459	34874	4449	6030	76812		29662	33925	5064	6734	75385		TOTAL	1138.0	2190.0	2207.0
1-4	1843	1714	267	76	64		2523	2428	385	114	103		467	384	104	108			OBSERVED	1144.8	2354.4	2781.1
5-9	1939	1890	222	22	225		3099	2945	427	461	395		1851	1788	435	395			EXPECTED*	0.994	0.930	0.792
10-14	1597	1644	222	215	339		2826	2738	415	359	341		2557	2483	596	590			OBS/EXP			
15-19	1581	1867	209	259	331		1919	2357	265	331	397		2496	2768	372	497		CV-RENAL				
20-24	1551	2140	264	386	499		1558	2056	278	499	499		1823	2664	337	454			OBSERVED	632.0	1193.0	1192.0
25-29	1715	1872	321	454	483		1741	2004	287	483	483		1897	2095	313	490			EXPECTED*	630.5	1312.5	1644.8
30-34	1574	1961	276	413	454		2074	2456	327	468	468		1601	1788	315	484			OBS/EXP	1.002	0.909	0.725
35-39	1798	2242	277	453	473		2258	2513	372	514	514		1675	1812	330	439						
40-44	2025	2301	287	439	473		2141	2417	318	473	486		1854	2204	345	484		HEART		439.0	861.0	884.0
45-49	1971	2153	238	352	473		2273	2471	309	473	471		2044	2247	326	471			OBSERVED	447.0	924.9	1136.0
50-54	1828	1941	205	269	438		2220	2398	259	438	438		1894	2085	266	407			EXPECTED*	0.962	0.933	0.777
55-59	1456	1615	114	172	335		1999	2055	255	335	335		1685	1947	227	361			OBS/EXP			
60-64	1151	1215	78	127	261		1525	1694	154	261	261		1234	1580	159	280						
65-69	856	1075	58	98	149		1079	1336	145	149	149		851	1234	104	185		NON CV-R		506.0	997.0	1015.0
70-74	575	751	53	61	112		723	1024	66	112	112		544	894	53	98			OBSERVED	516.3	1041.8	1142.3
75-79*	547	757	32	36	72		456	697	36	72	72		295	637	28	54			EXPECTED*	0.984	0.957	0.869
80-84*	0	0	0	0	0		231	398	24	38	38		229	508	29	57			OBS/EXP			
85-UP	89	173	7	12	24		162	319	13	24	24							CANCER				
TOTALS	24501	27723	3206	4295	59725		31459	34874	4449	6030	76812		29662	33925	5064	6734	75385		TOTAL			
GRAND TOTAL																						

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50			59-61		
	1949	1950	SUM	1959	1960	SUM
TOTAL	556	582	1138	671	757	1428
CV-RENAL	316	316	632	367	427	794
HEART	215	224	439	255	309	564
NON CV-R	240	266	506	304	330	634
CANCER	106	110	216	131	154	285

CITY CHARACTERISTICS

STATE	NEW YORK	
	196	196
1950 POP/50. MILE	6033	6033
1970 POP/50. MILE	7249	7249
1949 MED. FAM. INCOME	4215	4215
1969 MED. FAM. INCOME	13183	13183
URBAN CLASS	FRINGE	FRINGE
1950 URBAN AREA RANK	30	30
JAN MEAN TEMPERATURE	73	73
JULY MEAN TEMPERATURE	46	46
MEAN ANN. PRECIPITATION	R	R
LAND RESOURCE REGION	SURFACE	SURFACE
WATER SOURCE	50 PPM	50 PPM
TOTAL HARDNESS	NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS
FLUORIDATION STATUS	21 PPM	21 PPM

FLUORIDATED IN 1951

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NN	NF	WM	WF	NN	NF	WM	WF	NN	NF
IT 1	55300	53253	8265	8370	60025	57902	14867	15204	46503	44242	19852	19684
1-4	244973	234123	31082	30523	217726	210688	55103	55202	169140	162458	77740	76212
5-9	245018	235033	27136	27852	243521	235548	58127	58651	216942	207120	104957	102239
10-14	201466	193665	23876	24592	244560	237758	47770	47233	220021	211777	96354	96014
15-19	205191	214523	21658	25693	202816	214823	31930	37282	217211	219834	80527	84755
20-24	250448	277877	28473	41920	187605	213242	34633	47042	228709	270121	63586	87224
25-29	274980	361971	38452	49842	210541	212769	39914	50405	216387	226749	62286	87144
30-34	262010	297342	34270	44627	218857	224536	47327	55649	169297	171582	61395	76746
35-39	275347	316136	34426	42936	212522	235040	45246	54428	157231	164546	54832	68320
40-44	278752	299163	30537	33613	202187	230939	37363	45732	165134	166387	50793	64370
45-49	264553	260498	25761	27303	219735	259156	32489	36930	173362	202293	46555	46894
50-54	213279	211066	12994	20420	225570	233152	25885	30232	173362	202293	46555	46894
55-59	173727	171670	8260	13436	185712	188335	22585	26732	179335	210093	38758	39383
60-64	137277	131707	6260	7846	187412	179437	12553	17939	169750	203930	22950	20587
65-69	126639	126639	5281	7846	118743	171939	11300	13007	134286	178693	17893	24412
70-74	72659	88102	2216	4235	102762	121724	6861	8754	100007	143517	11447	15704
75-79	57239	76277	2116	3375	56545	70165	3637	5085	63793	92641	6099	8959
80-84	7478	12686	305	764	23826	30339	1448	2170	33476	52371	2944	5043
85-UP					11168	19114	760	1406	18835	31601	2123	3994
TOTALS	3463354	3653087	358434	417082	3189223	3451433	530028	611294	2851687	3197154	851668	994353
GRAND TOTAL				7891957			7781984					7894862

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	163664.0	267979.0	0.27153.0		267979.0	243962.6	0.278671.6		27153.0	278671.6	0.977	
CV-RENAL	88340.0	147989.0	0.140100.0		147989.0	133589.6	0.158896.6		140100.0	158896.6	0.882	
HEART	71733.0	119696.0	0.111610.0		119696.0	95609.4	0.110842.9		111610.0	110842.9	1.007	
NON CV-R	75324.0	119990.0	0.132053.0		119990.0	110373.6	0.11975.6		132053.0	11975.6	1.103	
CANCER	29832.0	49737.0	0.50666.0		49737.0	40685.8	0.43518.1		50666.0	43518.1	1.164	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949				1950				1959-61				1969-71				STATE	NEW YORK
	WM	WF	NN	NF	WM	WF	NN	NF	WM	WF	NN	NF	WM	WF	NN	NF		
TOTAL	81527	82137	163664	30523	49-50	SUM			1969	1970	1971	SUM	69-71	SUM			1950 RANK BY POPULATION	1
CV-RENAL	43464	44876	88340	27136	88861	88987	90131	267979	91752	90999	89402	272153	272153				1950 POE/SQ. MILE	25046
HEART	35135	36598	71733	12994	49297	49005	49687	147989	47515	46682	45903	140100	140100				1970 POE/SQ. MILE	26343
NON CV-R	30663	37261	75324	8260	39685	39646	40355	119686	37692	37188	36730	111610	111610				1949 MED. FAM. INCOME	3526
CANCER	14713	15119	29832	3375	16368	16587	16782	49737	16832	16584	16850	50666	50666				1969 MED. FAM. INCOME	9682
																	URBAN CLASS	CENTRAL
																	1950 URBAN AREA RANK	1
																	JAN MEAN TEMPERATURE	32
																	JULY MEAN TEMPERATURE	74
																	DEAN ANN. PRECIPITATION	72
																	DEAN RESOURCE REGION	5
																	WATER SUPPLY	SURFACE
																	WATER SUPPLY	43 BPM
																	TOTAL HARDNESS	16 BPM
																	FLUORIDATION STATUS	FLUORIDATED IN 1960

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	OBSERVED DEATHS BY CAUSE AND YEAR					69-71					STATE	CITY CHARACTERISTICS	CODE	
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971				69-71 SUM
URBAN CLASS	1949	768	769	1537	968	965	875	2808	946	922	926	2794	1950 POP/SQ. MILE	NEW YORK
	TOTAL	366	420	786	492	504	477	1473	540	511	505	1556	1970 POP/SQ. MILE	7155
	CV-RENAL	252	303	555	378	365	341	1084	395	374	362	1131	1949 MED. FAM. INCOME	6309
	HEART	402	349	751	476	461	398	1335	406	411	421	1238	1969 MED. FAM. INCOME	3716
	NON CV-R	127	115	242	181	176	134	491	151	174	179	504	1950 URBAN AREA RANK	9498
	CANCER													CENTRAL
														121
														25
														JAN MEAN TEMPERATURE
														70
URBAN CLASS	1949	768	769	1537	968	965	875	2808	946	922	926	2794	JULY MEAN TEMPERATURE	27
	TOTAL	366	420	786	492	504	477	1473	540	511	505	1556	MEAN ANN. PRECIPITATION	70
	CV-RENAL	252	303	555	378	365	341	1084	395	374	362	1131	LAND RESOURCE REGION	L
	HEART	402	349	751	476	461	398	1335	406	411	421	1238	WATER SOURCE	SURFACE
	NON CV-R	127	115	242	181	176	134	491	151	174	179	504	TOTAL HARDNESS	126 PPM
	CANCER													NON-CARBONATE HARDNESS
														38 PPM
														FLUORIDATION STATUS
														FLUORIDATION STATUS
														FLUORIDATION STATUS

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	346	346	23	24	337	347	60	76	207	166	78	76
1-4	1402	1415	74	70	1242	1214	214	246	721	701	302	309
5-9	1368	1364	82	86	1349	1333	201	220	906	890	417	409
10-14	1103	1127	98	75	1270	1281	149	165	970	970	327	375
15-19	1117	1223	80	91	960	1116	99	127	989	1011	259	255
20-24	1204	1507	69	88	889	1118	114	193	900	1111	193	273
25-29	1502	1621	79	68	1131	947	167	174	777	706	226	255
30-34	1502	1629	52	79	1020	1071	165	141	582	598	207	224
35-39	1445	1581	70	89	1048	1172	125	132	607	522	201	194
40-44	1403	1457	58	57	1045	1185	103	106	674	777	154	156
45-49	1266	1264	61	50	1007	1269	92	114	765	896	141	150
50-54	1201	1297	46	43	1071	1195	77	72	770	973	111	118
55-59	1113	1240	36	23	1018	1070	51	50	770	962	88	91
60-64	974	1014	29	24	850	1076	54	38	714	824	52	56
65-69	680	961	16	17	810	1027	32	37	615	800	76	53
70-74	488	683	16	16	625	860	25	27	461	702	38	27
75-79#	436	701	9	16	388	580	13	12	312	532	11	27
80-84#	0	0	0	0	158	326	6	12	176	353	12	14
85-UP	58	158	1	6	82	206	5	10	100	239	8	8
TOTALS	18606	20588	905	924	16300	18333	1752	1945	12046	13972	2901	3110
GRAND TOTAL				41023				38330				32029

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1103.0	1649.0	1566.0	850.4	1421.5	1341.7	1.297	1.155	1.167
CV-RENAL									
OBSERVED									
EXPECTED*									
OBS/EXP									
HEART									
OBSERVED									
EXPECTED*									
OBS/EXP									
NON CV-R									
OBSERVED									
EXPECTED*									
OBS/EXP									
CANCER									
OBSERVED									
EXPECTED*									
OBS/EXP									

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS				OBSERVED DEATHS				OBSERVED DEATHS			
	1949	1950	1959	1960	1961	1969	1970	1971	1971	1971	1971	1971
TOTAL	534	569	535	547	567	513	531	522	522	522	522	522
CV-RENAL												
HEART												
NON CV-R												
CANCER												

CITY CHARACTERISTICS

CODE

STATE	NEW YORK
1950 RANK BY POPULATION	293
1950 POP/SQ. MILE	8546
1970 POP/SQ. MILE	6673
1949 MED. FAM. INCOME	3595
1969 MED. FAM. INCOME	9746
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	26
JAN MEAN TEMPERATURE	73
JULY MEAN TEMPERATURE	73
WIND DIRECTION	47
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	71 PPM
NON-CARBONATE HARDNESS	30 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960			1970		
	WM	WF	NP	WM	WF	NP	WM	WF	NP
LT 1	367	2888	113	3042	2904	509	2354	2194	800
1-4	11934	11783	343	11064	10390	1798	7904	7633	3031
5-9	10732	10429	318	11671	11299	1520	9151	8907	3723
10-14	8368	8129	247	11034	10736	1030	8938	8594	3209
15-19	8434	9770	238	9025	9954	682	9477	9958	2196
20-24	10658	12227	352	8621	10074	868	11403	13838	1989
25-29	12998	14474	450	8971	8387	1168	9532	8725	2055
30-34	12373	13683	380	8202	8673	1020	5686	5422	1755
35-39	11283	12339	344	8400	9564	907	4944	4869	1416
40-44	10200	11155	281	8654	10288	657	5362	5943	1284
45-49	9576	10676	284	8774	9928	565	5952	7073	1030
50-54	10187	11210	236	8136	9304	373	6439	7918	745
55-59	9777	10666	121	7774	9035	336	7706	8706	572
60-64	9078	9392	94	7606	9131	215	5687	7298	467
65-69	6989	7966	68	6896	8615	159	4640	6697	328
70-74	4522	5526	45	5621	7258	83	4126	6454	193
75-79*	3934	5475	28	3544	4835	47	3072	5095	100
80-84*	0	0	0	1725	2675	21	1913	3372	37
85-UP	623	1122	11	844	1731	12	1157	2331	51
TOTALS	154733	169910	3953	139604	154779	11838	114091	130027	24921
GRAND TOTAL			3892			12390			27194
			332488			318611			296233

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	7865.0	12256.0	1.101	7146.5	12112.7	1.012	7146.5	11911.4	0.932
CV-RENAL	4663.0	7430.0	1.148	4061.1	7058.9	1.053	4061.1	7058.9	0.836
HEART	3438.0	5652.0	1.181	2911.1	4981.2	1.135	2911.1	4981.2	0.881
NON CV-R	3202.0	4826.0	1.038	3085.4	5053.9	0.955	3085.4	5053.9	0.955
CANCER	1280.0	2036.0	1.083	1182.2	1899.5	1.072	1182.2	1899.5	1.072
									1.146

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949			1950			1959-61			1969			1971			1972		
	WM	WF	NP	WM	WF	NP	WM	WF	NP	WM	WF	NP	WM	WF	NP	WM	WF	NP
TOTAL	3865	4000	7865	3865	4000	7865	3865	4000	7865	3865	4000	7865	3865	4000	7865	3865	4000	7865
CV-RENAL	2272	2391	4663	2272	2391	4663	2272	2391	4663	2272	2391	4663	2272	2391	4663	2272	2391	4663
HEART	1663	1775	3438	1663	1775	3438	1663	1775	3438	1663	1775	3438	1663	1775	3438	1663	1775	3438
NON CV-R	1593	1609	3202	1593	1609	3202	1593	1609	3202	1593	1609	3202	1593	1609	3202	1593	1609	3202
CANCER	615	665	1280	615	665	1280	615	665	1280	615	665	1280	615	665	1280	615	665	1280

NEW YORK			NEW YORK			NEW YORK		
STATE			STATE			STATE		
1950 RANK BY POPULATION	32		1950 RANK BY POPULATION	32		1950 RANK BY POPULATION	32	
1970 POP/SQ. MILE	3436		1970 POP/SQ. MILE	3436		1970 POP/SQ. MILE	3436	
1950 MED. FAM. INCOME	3564		1950 MED. FAM. INCOME	3564		1950 MED. FAM. INCOME	3564	
1970 MED. FAM. INCOME	10002		1970 MED. FAM. INCOME	10002		1970 MED. FAM. INCOME	10002	
URBAN PERCENT	CENTRAL		URBAN PERCENT	CENTRAL		URBAN PERCENT	CENTRAL	
1950 URBAN AREA RANK	33		1950 URBAN AREA RANK	33		1950 URBAN AREA RANK	33	
JAN. MEAN TEMPERATURE	24		JAN. MEAN TEMPERATURE	24		JAN. MEAN TEMPERATURE	24	
JULY MEAN TEMPERATURE	71		JULY MEAN TEMPERATURE	71		JULY MEAN TEMPERATURE	71	
MEAN ANNUAL PRECIPITATION	31		MEAN ANNUAL PRECIPITATION	31		MEAN ANNUAL PRECIPITATION	31	
LAND RESOURCE REGION	L		LAND RESOURCE REGION	L		LAND RESOURCE REGION	L	
WATER SOURCE	SURFACE		WATER SOURCE	SURFACE		WATER SOURCE	SURFACE	
TOTAL HARDNESS	82 PPM		TOTAL HARDNESS	82 PPM		TOTAL HARDNESS	82 PPM	
NON-CARBONATE HARDNESS	41 PPM		NON-CARBONATE HARDNESS	41 PPM		NON-CARBONATE HARDNESS	41 PPM	
FLUORIDATION STATUS	UNCERTAIN		FLUORIDATION STATUS	UNCERTAIN		FLUORIDATION STATUS	UNCERTAIN	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NK	NP
LT 1	449	426	7	5
2	1862	1743	37	30
3	1868	1803	33	36
4	1569	1425	35	21
5-9	1426	1350	23	21
10-14	1411	1673	27	29
15-19	20-24	1835	38	30
25-29	30-34	1779	31	31
35-39	40-44	1587	29	21
45-49	50-54	1340	27	13
55-59	60-64	1065	16	8
65-69	70-74	1058	11	11
75-79*	80-84*	1063	7	7
85-UP		873	8	3
TOTALS	20810	20269	332	271
GRAND TOTAL				41682

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM
TOTAL	357	379	736	452	434	439	1325
CV-RENAL	206	239	445	283	280	285	848
HEART	164	191	355	239	213	217	659
NON CV-R	151	140	291	169	172	159	500
CANCER	52	49	101	65	63	63	185

CITY CHARACTERISTICS

STATE RANK BY POPULATION	NEW YORK
1950 POP./SQ. MILE	286
1950 POP./SQ. MILE	541
1970 POP./SQ. MILE	591
1949 MED. FAM. INCOME	3324
1969 MED. FAM. INCOME	9185
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	20
JULY MEAN TEMPERATURE	69
MEAN ANN. PRECIPITATION	46
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	35 PPM
NON-CARBONATE HARDNESS	10 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

AGE GROUP	1950			1960			1970			CAUSE	OBSERVED EXPECTED*	1949-50	1959-61	1969-7
	WM	WF	NP	WM	WF	NP	WM	WF	NP					
LT 1	789	747	8	775	801	29	24	625	633	52	30	2150.0	3491.0	3507.0
1-4	3238	3091	48	2899	2761	131	135	2349	2199	186	194	1861.3	3043.2	3284.2
5-9	3059	2950	55	3182	2734	122	135	2818	2734	221	219	1.155	1.147	1.168
10-14	2248	2160	55	2649	2893	81	94	2876	2701	214	201			
15-19	2567	2354	34	2965	2478	70	66	3288	2663	205	171			
20-24	3488	3506	47	2187	2275	52	82	3408	3389	137	139			
25-29	4162	4269	95	2188	2257	79	89	2604	2450	127	135			
30-34	3838	3918	73	2196	2427	70	79	1557	1606	110	111			
35-39	3450	3597	64	2389	2716	77	89	1383	1633	98	118			
40-44	2980	3231	70	2530	2940	77	76	1723	2004	84	109			
45-49	2679	2824	69	2680	3601	57	59	1968	2360	98	95			
50-54	2799	2871	52	2375	2752	54	60	2198	2718	79	77			
55-59	2451	2683	42	2218	2436	65	46	2167	2613	45	61			
60-64	2305	2466	18	2027	2366	39	32	1755	2383	63	65			
65-69	1912	2124	11	1728	2219	36	24	1422	2040	39	49			
70-74	1177	1459	7	1398	1913	10	10	1206	1906	28	34			
75-79#	1048	1332	7	1048	1302	9	10	860	1549	21	22			
80-84#	0	0	0	430	658	1	7	543	976	1	8			
85-UP	154	283	3	199	378	0	4	299	631	1	6			
TOTALS	44344	45965	767	37963	41536	1059	1124	35049	39188	1818	1804			
GRAND TOTAL			91785				81682				77859			

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NP	WM	WF	NH	NP
LT 1	2821	2023	58	77	2243	2127	223	242
5-9	7854	7385	217	233	8095	7705	914	844
10-14	7350	6916	190	226	8567	8238	770	769
15-19	5829	5570	200	172	7617	7471	518	546
20-24	6996	7982	148	195	6979	8148	341	459
25-29	10438	10198	274	285	7209	7684	504	592
30-34	9480	9421	307	297	9480	9421	636	610
35-39	7882	8486	236	238	6011	6272	472	502
40-44	7061	7754	234	196	6096	6768	423	420
45-49	6710	7387	175	157	5867	6700	312	327
50-54	6301	6863	155	124	5619	6436	291	254
55-59	6601	6953	126	108	5565	6321	186	210
60-64	6183	6557	81	68	5104	5885	178	130
65-69	5257	5370	54	43	4923	5693	95	122
70-74	3817	4476	34	45	4385	5360	93	79
75-79*	2562	3303	23	28	3318	4071	56	39
80-84*	2334	3208	17	29	1966	2684	23	38
85-UP	346	651	4	4	887	1500	20	20
TOTALS	105022	110503	2533	2525	97452	106305	6062	6219
GRAND TOTAL				220583				216038

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61			
	1949	1950	SUM	49-50	1959	1960	1961	SUM
TOTAL	2566	2421	4987	4987	2608	2703	2565	7876
CV-RENAL	1493	1451	2944	2944	1592	1604	1557	4753
HEART	1074	1037	2111	2111	1115	1153	1120	3388
NON CV-R	1073	970	2043	2043	1016	1099	1008	3123
CANCER	384	389	773	773	409	450	421	1280

CITY CHARACTERISTICS

STATE	NEW YORK
1950 RANK BY POPULATION	47
1950 POP/SQ. MILE	8719
1970 POP/SQ. MILE	7644
1949 MED. FAM. INCOME	3471
1969 MED. FAM. INCOME	9246
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	47
JAN MEAN TEMPERATURE	25
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	36
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HAEDNESS	109 PPM
NON-CARBONATE HARDNESS	15 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1965

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 4987.0 EXPECTED* 4275.6 OBS/EXP 1.166	7876.0 7260.4 1.085	7387.0 7311.0 1.010
CV-RENAL	OBSERVED 2944.0 EXPECTED* 2385.2 OBS/EXP 1.234	4753.0 4142.8 1.147	4176.0 4326.6 0.965
HEART	OBSERVED 2111.0 EXPECTED* 1711.4 OBS/EXP 1.233	3388.0 2938.9 1.153	2972.0 3007.4 0.988
NON CV-R	OBSERVED 2043.0 EXPECTED* 1890.4 OBS/EXP 1.081	3123.0 3117.6 1.002	3211.0 2984.4 1.076
CANCER	OBSERVED 773.0 EXPECTED* 703.8 OBS/EXP 1.098	1280.0 1152.0 1.111	1326.0 1095.2 1.206

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	MM	MF
IT 1	637	612	13	10
1-4	2786	2572	49	45
5-9	2400	2467	33	30
10-14	2075	2000	29	35
15-19	2620	2472	28	27
20-24	3678	2946	55	42
25-29	3142	2842	54	67
30-34	2411	2714	36	46
35-39	2261	2430	44	40
40-44	2170	2454	41	29
45-49	2141	2218	26	34
50-54	2018	2404	29	25
55-59	1848	2111	15	15
60-64	1575	1900	15	15
65-69	1214	1667	9	12
70-74	836	1241	11	9
75-79*	733	1312	3	7
80-84*	0	0	0	0
85-up	124	259	0	0
TOTALS	34709	36624	490	488
GRAND TOTAL			72311	

1960				
WM	WP	NM	NP	
649	639	32	35	
2825	2399	114	134	
2762	2730	125	150	
2605	2560	94	105	
3149	2656	60	56	
2569	2051	94	91	
1722	1776	100	87	
1778	1810	109	84	
1747	1963	70	77	
1778	2163	53	58	
2019	2189	52	48	
1804	2158	48	32	
1677	1939	24	34	
1951	1932	19	16	
1356	1861	20	18	
1007	1506	13	12	
985	995	7	10	
594	594	3	2	
278	540	3	2	
145	333	4	2	
31380	34020	1041	1051	67492

1970		1970		1970	
PM	NP	PM	NP	PM	NP
503	507	51	54	557	557
1771	1771	188	175	30957	1714
2255	2255	219	218	1690	62918
308	308	205	197		
953	3009	194	181		
3059	3059	212	177		
1685	1685	126	124		
1212	1212	110	117		
1266	1266	86	98		
1422	1422	75	78		
1615	1615	57	74		
1854	1854	45	61		
1668	1668	28	44		
1870	1870	28	44		
1830	1830	34	25		
1555	1555	22	36		
1523	1523	13	26		
111	111	11	16		
790	790	8	16		
332	332	740	3		
221	221	537	3		

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	2145.0	2989.0	2704.0
EXPECTED*	1452.9	2321.9	2456.2
OBS/EXP	1.477	1.287	1.104
CV-RENAL			
OBSERVED	1335.0	1833.0	1599.0
EXPECTED*	825.2	1345.5	1481.8
OBS/EXP	1.618	1.362	1.079
HEART			
OBSERVED	954.0	1356.0	1160.0
EXPECTED*	597.4	952.7	1025.7
OBS/EXP	1.624	1.423	1.131
NON CV-R			
OBSERVED	810.0	1156.0	1105.0
EXPECTED*	627.2	976.4	968.3
OBS/EXP	1.291	1.184	1.141
CANCER			
OBSERVED	262.0	463.0	497.0
EXPECTED*	236.8	371.8	363.4
OBS/EXP	1.107	1.245	1.368

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

	OBSERVED DEATHS BY CAUSE AND YEAR							CITY CHARACTERISTICS							CODE
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	NEW YORK		
CAUSE												1950 BANK BY POPULATION	160		
TOTAL	1086	1059	2145	1039	959	991	2989	954	886	864	2704	1950 POP/SQ. MILE	7775		
CY-RENAI	686	649	1335	616	579	638	1833	548	549	502	1599	1970 POP/SQ. MILE	6230		
HEART	493	461	954	463	432	461	1356	384	415	361	1160	1949 MED. FAM. INCOME	3257		
NON CV-R	400	410	810	423	380	353	1156	406	337	362	1105	1969 MED. FAM. INCOME	9111		
CANCER	122	140	262	148	165	150	463	168	167	162	497	URBAN CLASS	CENTRAL		
												1950 URBAN AREA RANK	44		
												JAN MEAN TEMPERATURE	22		
												JULY MEAN TEMPERATURE	69		
												MEAN ANN. PRECIPITATION	35		
												LAND RESOURCE REGION	R		
												WATER SOURCE	SURFACE		
												TOTAL HARDNESS	40 PPM		
												NON-CARBONATE HARDNESS	13 PPM		
												FLUORIDATION STATUS	FLUORIDATED		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	WM	NF	WM	WF	NF	WM	WF	NF
IT 1	887	908	23	23	1061	1010	57	63		676	675	83
1-4	3662	3550	103	93	3682	3626	229	218		2649	2646	344
5-9	3549	3494	94	66	3689	3772	239	195		3132	3196	302
10-14	2832	2829	42	6	2813	3142	160	172		3607	3463	409
15-19	2600	2610	44	6	2813	3142	100	120		3500	3816	365
20-24	3045	3010	58	74	2402	2809	94	134		3279	3623	302
25-29	3045	4096	86	95	2750	2625	103	124		2410	2497	234
30-34	3622	4174	81	69	2789	2927	113	131		1812	1861	119
35-39	3626	4122	57	72	3183	3373	104	101		1771	1843	197
40-44	3359	3498	63	45	3098	3559	87	81		2089	2387	139
45-49	2854	3260	51	44	3039	3569	95	74		2557	2912	123
50-54	3002	3372	46	31	2809	2992	68	45		2580	3110	120
55-59	3064	3098	26	19	2382	2923	50	43		2463	3116	95
60-64	2599	2733	22	19	2332	2824	22	30		2092	2562	72
65-69	1999	2278	11	14	2257	2731	29	20		1609	2388	47
70-74	1419	1652	9	10	1774	2180	17	15		1356	2230	26
75-79*	1307	1744	5	7	1076	1430	11	8		1133	1741	16
80-84*	0	0	0	0	557	876	2	4		710	1146	15
85-UP	213	382	1	2	353	595	1	4		421	811	5
TOTALS	47895	51966	845	825	46262	50955	1571	1622		40176	46004	2858
GRAND TOTAL				101531				100410				91611

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 2329.0 EXPECTED* 2197.6 OBS/EXP 1.060	3870.0 3830.0 0.997	3805.0 3805.0 0.961
CV-RENAL	OBSERVED 1399.0 EXPECTED* 1260.6 OBS/EXP 1.110	2421.0 2255.5 1.073	2360.0 2423.0 0.974
HEART	OBSERVED 1060.0 EXPECTED* 900.3 OBS/EXP 1.177	1846.0 1590.6 1.161	1801.0 1679.4 1.072
NON CV-R	OBSERVED 930.0 EXPECTED* 937.0 OBS/EXP 0.993	1399.0 1574.4 0.889	1445.0 1534.9 0.941
CANCER	OBSERVED 344.0 EXPECTED* 358.9 OBS/EXP 0.958	570.0 599.6 0.951	623.0 591.4 1.053

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	59-61 SUB	1969	1970	1971	1971 SUB	69-71 SUB	CODE
TOTAL	1231	1098	1317	1250	1253	3820	1272	1244	1289	3805		STATE 1950 RANK BY POPULATION 106
CV-RENAL	741	658	849	719	793	2021	795	767	798	2360		1950 POP/SQ. MILE 5726
HEART	560	500	640	616	590	1846	638	569	604	1801		1970 POP/SQ. MILE 5726
NON CV-R	490	440	468	471	460	1399	477	477	491	1845		1949 MED. FAM. INCOME 3268
CANCER	166	178	188	183	199	570	204	216	203	623		1969 MED. FAM. INCOME 9008
												URBAN CLASS CENTRAL
												1950 URBAN AREA RANK 107
												JAN MEAN TEMPERATURE 17
												JULY MEAN TEMPERATURE 74
												MEAN ANN. PRECIPITATION 42
												LAND RESOURCE REGION L
												GROUND AND SURFACE WATER SOURCE
												TOTAL HARDNESS 16 PPM
												NON-CARBONATE HARDNESS 10 PPM
												FLUORIDATION STATUS FLUORIDATED IN 1967

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	279	268	2	0	357	331	0	1	231	210	0	2
1-4	1216	1221	1	3	1521	1574	2	5	1011	1011	5	5
5-9	1180	1123	0	0	2052	1934	4	3	1694	1627	9	7
10-14	851	786	5	0	2001	1925	1	3	2055	2168	5	9
15-19	736	745	0	1	1267	1259	1	1	2011	1935	7	4
20-24	750	894	4	3	683	810	3	10	1294	1407	4	4
25-29	971	1154	4	4	778	938	0	5	986	886	2	4
30-34	1067	1209	1	1	1202	1448	3	9	729	880	4	9
35-39	1103	1165	2	1	1136	1696	2	2	992	1136	5	9
40-44	1128	1051	0	1	1483	1639	0	3	1337	1621	7	6
45-49	1023	1017	0	1	1339	1446	2	3	1634	1755	3	5
50-54	928	936	5	0	1275	1186	1	2	1449	1618	4	7
55-59	694	692	0	0	995	1005	1	1	1308	1334	2	1
60-64	527	479	1	0	819	888	2	1	1014	1023	0	2
65-69	313	305	1	1	563	718	4	1	614	807	4	4
70-74	192	271	1	0	392	514	0	0	475	651	1	4
75-79	172	265	0	0	195	267	1	0	264	451	1	1
80-84	0	0	0	0	86	135	0	0	137	263	1	1
85-89	24	47	0	2	42	81	0	0	54	143	0	1
TOTALS	13154	13654	27	19	18709	19844	26	50	19329	20936	64	84
GRAND TOTAL				26854				36629				40413

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	458.0	400.9	1.142	1089.0	944.5	1.155	1128.0	1208.3	0.937
CV-RENAL	278.0	208.5	1.333	601.0	506.9	1.186	633.0	693.0	0.913
HEART	238.0	152.3	1.562	477.0	370.3	1.288	499.0	498.0	1.002
NON CV-R	180.0	192.3	0.936	488.0	435.6	1.120	495.0	511.3	0.968
CANCER	73.0	68.2	1.070	241.0	163.7	1.472	250.0	204.8	1.221

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE		NEW YORK	
	STATE	1950 RANK BY POPULATION	456	7459
1950 POP./SQ. MILE	1970 POP./SQ. MILE	11547	4267	13517
1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	FRINGE	29	1
URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	71	47
1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	5	47
MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	GROUND	45	45
LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	2	2
WATER SOURCE	NON-CARBONATE HARDNESS	FLUORINATION STATUS	NO ARTIFICIAL, LOW NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	NM	NF	NP	NM	NF	NP	NM	NF	NP	NM	NF	NP	NM	NF	NP	NM	NF	NP
LT 1	385	322	0	2	0	0	368	345	1	4	4	0	237	252	1	1	1	1
1-4	1422	1350	2	6	2	2	1438	1408	16	12	12	8	1028	947	8	8	8	8
5-9	1305	1180	5	7	8	11	1604	1562	11	16	16	11	1477	1404	11	11	12	12
10-14	1114	1103	7	8	1	1	1523	1441	5	1	1	7	1514	1468	10	7	8	8
15-19	982	1141	5	7	7	4	979	1243	3	4	4	4	1316	1414	10	5	4	4
20-24	976	1321	3	3	7	4	686	948	10	4	4	4	994	1188	8	7	10	4
25-29	1193	1376	3	3	3	3	809	896	12	15	15	15	758	863	8	5	5	5
30-34	1150	1246	6	5	4	8	806	987	4	8	8	8	625	688	8	5	5	5
35-39	1117	1238	5	4	4	2	940	1063	5	2	2	2	647	727	6	9	9	9
40-44	1039	1168	3	3	4	4	963	1091	5	4	4	4	790	868	4	3	3	3
45-49	985	1130	1	3	3	3	916	1096	5	4	4	4	757	842	3	2	2	2
50-54	1021	1156	3	3	2	3	893	960	3	3	3	3	947	1052	4	4	4	4
55-59	852	974	3	2	2	2	796	1013	2	3	3	3	692	859	4	2	2	2
60-64	773	935	3	2	2	2	777	1006	2	1	1	1	538	840	2	2	2	2
65-69	684	841	4	2	2	2	632	933	1	0	0	0	400	829	0	1	1	1
70-74	485	659	3	2	2	2	322	553	3	1	1	1	300	611	1	0	0	0
75-79#	499	688	0	0	0	0	458	563	1	0	0	0	180	417	1	1	1	1
80-84#	0	0	0	0	0	0	469	303	1	0	0	0	113	310	0	0	0	0
85-89P	80	136	1	1	0	0	117	210	2	0	0	0	113	310	0	0	0	0
TOTALS	16062	18164	65	59	59	83	15365	17767	91	83	83	92	13993	16616	86	92	92	92
GRAND TOTAL																		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 774.6 OBS/EXP	1009.0 1253.3 1.151	1331.0 1268.0 1.050
CV-RENAL	OBSERVED 449.0 OBS/EXP	852.0 746.1 1.142	789.0 782.7 1.008
HEART	OBSERVED 370.0 OBS/EXP	609.0 523.6 1.163	570.0 541.9 1.052
NON CV-R	OBSERVED 375.0 OBS/EXP	557.0 507.2 1.098	542.0 485.3 1.117
CANCER	OBSERVED 132.0 OBS/EXP	186.0 194.2 0.958	221.0 189.9 1.164

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	1959	1960	1961	1969	1970	1971	1972
TOTAL	436	456	476	486	447	453	459	419	1331
CV-RENAL	247	270	304	288	260	258	285	246	789
HEART	177	193	219	203	187	179	215	176	570
NON CV-R	189	186	172	198	187	195	174	173	542
CANCER	65	67	60	61	65	77	71	73	221

CITY CHARACTERISTICS

CODE

STATE	NEW YORK
1950 RANK BY POPULATION	35841
1950 POP/50.0 MILE	384.1
1950 POP/50.0 MILE	325.1
1949 MED. FAM. INCOME	8978
1969 MED. FAM. INCOME	8978
URBAN CLASS.	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	20
JULY MEAN TEMPERATURE	70
MEAN ANN. PRECIPITATION	40
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	78 PPM
NON-CARBONATE HARDNESS	19 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1962

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	294	284	48	40	357	372	72	55	232	308	56	74
1-4	1383	1258	194	159	1532	1408	244	257	1006	968	275	262
5-9	4077	4328	131	108	1869	1737	277	274	1554	1509	350	389
10-14	1207	1162	133	139	1771	1681	273	228	1733	1653	375	349
15-19	1088	1184	103	166	1252	1448	139	200	1494	1639	278	326
20-24	1049	1401	156	244	836	1318	189	321	1150	1669	230	377
25-29	1206	1418	192	247	1095	1228	188	298	1282	1384	272	382
30-34	1163	1493	159	235	1324	1498	214	285	986	1209	218	353
35-39	1308	1724	184	294	1441	1604	192	267	1127	1192	200	320
40-44	1521	1817	192	219	1310	1644	154	239	1330	1465	217	279
45-49	1533	1647	138	165	1497	1898	185	289	1352	1594	181	286
50-54	1473	1514	107	122	1616	1870	142	216	1213	1548	135	220
55-59	1150	1293	85	74	1492	1625	130	171	1306	1657	132	248
60-64	952	1030	40	58	1175	1323	78	117	1275	1605	129	211
65-69	617	882	30	42	873	1184	54	75	927	1257	91	138
70-74	437	599	18	29	578	802	46	36	654	971	47	90
75-79	355	673	15	15	342	620	21	20	407	739	32	49
80-84	0	0	0	0	214	325	10	12	223	443	15	25
85-UP	61	158	2	4	92	234	2	9	167	316	9	21
TOTALS	18274	20865	1927	2400	20682	23804	2630	3369	19418	23126	3182	4399
GRAND TOTAL				43466				50485				50125

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	875.0	856.8	1.021		1752.0	1695.6	1.033		1773.0	1945.5	0.911	
CV-RENAL	501.0	477.5	1.049		945.0	954.0	0.980		935.0	1154.0	0.810	
HEART	373.0	339.6	1.098		709.0	682.2	1.039		685.0	803.4	0.853	
NON CV-R	374.0	379.3	0.986		807.0	731.0	1.104		838.0	791.5	1.059	
CANCER	155.0	141.4	1.096		380.0	276.9	1.372		362.0	305.7	1.184	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949		1950		49-50		1959		1960		1961		59-61		1969		1970		1971		69-71		STATE
	1949	1950	1950	49-50	1959	1960	1961	59-61	1969	1970	1971	SUM	SUM										
TOTAL	442	433	875		605	593	554	1752	638	580	555	1773											
CV-RENAL	284	257	501		322	351	272	945	352	297	286	935											
HEART	184	189	373		291	265	194	709	216	216	221	695											
NON CV-R	198	176	374		283	242	282	807	286	283	269	838											
CANCER	73	82	155		125	120	135	380	119	126	117	362											

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	1317	1251	60	51	1931	1863	136	116
5-9	5207	5362	208	227	7038	6754	420	408
10-14	4505	4300	194	187	7163	7165	420	408
15-19	4238	4572	193	230	5349	5955	312	329
20-24	4774	5582	180	270	4705	5375	228	269
25-29	5343	6025	244	253	4201	5346	240	372
30-34	5416	6057	172	237	5291	5846	321	385
35-39	5766	6345	167	269	6090	6425	276	333
40-44	5788	6083	191	222	6234	6875	288	323
45-49	5305	5485	142	185	6097	6884	212	277
50-54	5116	5158	130	153	6498	7149	194	243
55-59	4235	4329	96	105	6210	6486	196	234
60-64	3319	3635	72	77	5423	5558	145	186
65-69	2340	2662	63	64	4492	4837	119	132
70-74	1429	1907	30	39	3365	3966	93	124
75-79*	1192	1829	13	24	2234	2969	58	77
80-84*	0	0	0	0	1228	1745	35	42
85-UP	209	342	1	6	609	926	15	22
TOTALS	71424	76304	2316	2754	87723	94859	3721	4331
GRAND TOTAL				152798			190634	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*
TOTAL	3047.0	5526.0	1.139		3047.0	5526.0
CV-RENAL						
HEART						
NON CV-R						
CANCER						

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949	1950	49-50	1959	1960	1961	59-61	1969	1970	1971	69-71	STATE	NEW YORK
			SUM				SUM				SUM	1950 RANK BY POPULATION	
TOTAL	1487	1560	3047	1785	1856	1885	5526	2147	2060	2175	6382	1950 POP/1000	884
CV-RENAL	803	877	1680	1061	1054	1051	3166	1180	1132	1200	3512	1970 POP/1000	13542
HEART	609	699	1308	834	862	836	2532	943	924	1039	2906	1949 MED. FAM. INCOME	4219
NON CV-R	684	683	1367	724	802	834	2360	967	936	975	2870	1969 MED. FAM. INCOME	12151
CANCER	277	289	566	339	357	378	1074	447	436	444	1327	URBAN CLASS	FRINGE
												1950 URBAN AREA RANK	1
												JAN MEAN TEMPERATURE	32
												JULY MEAN TEMPERATURE	76
												MEAN ANN. PRECIPITATION	43
												LAND RESOURCE REGION	R
												WATER SOURCE	SURFACE
												TOTAL HARDNESS	61 PPM
												NON-CARBONATE HARDNESS	29 PPM
												FLUORIDATION STATUS	FLUORIDATED IN 1965

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	NM	NF	NE	NM	NF	NE	NM	NF	NE	NM	NF	NE	NM	NF	NE	NM	NF	NE
IT 1	376	384	152	481	438	140	120	120	120	321	271	93	321	271	93	321	271	93
1-4	1528	1481	554	1764	1788	526	495	495	495	1252	1224	378	1252	1224	378	1252	1224	378
5-9	1478	1461	449	1639	2099	592	655	655	655	1907	1910	512	1907	1910	512	1907	1910	512
10-14	1201	1292	464	1420	2123	584	586	586	586	2048	1964	614	2048	1964	614	2048	1964	614
15-19	1131	1360	390	1493	1753	349	403	403	403	1777	1889	473	1777	1889	473	1777	1889	473
20-24	1304	1944	418	1562	1555	265	299	299	299	1291	1714	312	1291	1714	312	1291	1714	312
25-29	1661	1980	450	1376	1536	221	326	326	326	1278	1510	247	1278	1510	247	1278	1510	247
30-34	1658	1771	406	1531	1822	286	388	388	388	1191	1359	205	1191	1359	205	1191	1359	205
35-39	1469	1768	426	1459	1802	344	407	407	407	1158	1310	172	1158	1310	172	1158	1310	172
40-44	1353	1584	424	1426	1790	327	395	395	395	1333	1585	227	1333	1585	227	1333	1585	227
45-49	1212	1440	409	1468	1769	322	403	403	403	1473	1753	268	1473	1753	268	1473	1753	268
50-54	1087	1390	396	1307	1661	293	427	427	427	1303	1638	266	1303	1638	266	1303	1638	266
55-59	918	1154	260	1139	1432	330	399	399	399	1258	1586	235	1258	1586	235	1258	1586	235
60-64	756	953	191	995	1337	231	307	307	307	1094	1629	212	1094	1629	212	1094	1629	212
65-69	584	810	146	889	1306	186	257	257	257	889	1384	219	889	1384	219	889	1384	219
70-74	421	620	72	621	975	138	146	146	146	691	1254	163	691	1254	163	691	1254	163
75-79*	366	579	81	441	641	72	92	92	92	491	938	80	491	938	80	491	938	80
80-84*	0	0	0	196	368	29	44	44	44	262	567	60	262	567	60	262	567	60
85-UP	43	119	11	120	258	21	44	44	44	160	376	30	160	376	30	160	376	30
TOTALS	18446	22090	5699	22190	26553	5256	6193	6193	6193	21177	25861	4766	21177	25861	4766	21177	25861	4766
GRAND TOTAL			53000				60192	60192	60192									

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1145.0	2265.0	2305.0	976.6	2039.3	2558.5	1.172	1.111	1.062
CV-PENAL	619.0	1322.0	1348.0	517.1	1154.1	1413.4	1.197	1.145	0.954
HEART	405.0	892.0	894.0	359.7	799.3	969.3	1.126	1.116	0.922
NON CV-R	526.0	943.0	1157.0	459.4	885.2	945.1	1.145	1.065	1.224
CANCER	136.0	326.0	381.0	153.1	316.5	358.8	0.889	1.030	1.062

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	49-50	1959	1960	59-61	1969	1970	1971	69-71	CODE	
TOTAL	551	594	1145	671	801	793	824	810	871	2505	STATE	
CV-PENAL	284	335	619	393	489	440	461	420	467	1348	1950 RANK BY POPULATION	
HEART	174	231	405	256	342	294	299	276	319	776	1950 POP/100,000	
NON CV-R	267	259	526	278	312	353	363	390	404	1157	1970 POP/100,000	
CANCER	78	58	136	100	121	105	110	132	139	381	1949 MED. FAM. INCOME	
											1969 MED. FAM. INCOME	
											URBAN CLASS	
											1950 URBAN AREA RANK	
											JAN MEAN TEMPERATURE	
											JULY MEAN TEMPERATURE	
											MEAN ANN. PRECIPITATION	
											LAND RESOURCE REGION	
											WATER SOURCE	
											TOTAL HARDNESS	
											NON-CARBONATE HARDNESS	
											FLUORIDATION STATUS	
											FLOODING IN 1965	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NN	NF	WM	WF	NN	NF
LT-1	1078	1101	460	497	1665	1684	861	900
1-4	4167	4115	1691	1775	6704	6531	3262	3408
5-9	4005	3853	1790	1675	7532	7433	3651	3820
10-14	2990	2971	1428	1462	6471	6229	2830	2740
15-19	2711	2431	1208	1503	4941	4523	2300	2400
20-24	3703	3452	1508	1602	4376	3630	1833	2195
25-29	4593	4427	1508	1672	5236	5267	1666	2111
30-34	4593	4574	1485	1782	5710	6240	2169	2232
35-39	3805	4325	1555	1872	5908	6505	1671	2084
40-44	3004	3784	1303	1405	4847	5109	1685	1835
45-49	2855	3204	1088	1317	4201	4579	1411	1620
50-54	2447	2603	812	875	3538	4060	1111	1259
55-59	1812	1950	550	556	2816	3219	933	1109
60-64	1225	1498	373	390	2112	2729	587	805
65-69	895	1268	325	418	1513	2120	461	593
70-74	572	809	147	228	953	1508	312	399
75-79*	426	729	149	191	586	1133	178	230
80-84*	0	0	0	0	306	559	61	101
85-UP	52	107	26	44	130	370	43	88
TOTALS	45350	51181	17538	19973	68367	76726	26336	30135
GRAND TOTAL				134042				201564

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	2177.0	1812.7	1.201	4669.0	4568.4	1.022
CV-RENAL	1087.0	841.1	1.292	2438.0	2232.2	1.096
HEART	763.0	587.0	1.300	1789.0	1544.6	1.158
NON CV-R	1090.0	971.5	1.122	2231.0	2344.2	0.952
CANCER	265.0	274.6	0.965	639.0	680.4	0.939

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	NORTH CAROLINA	
	STATE	69
1950 BANK BY POPULATION	1950 POP/1000	4468
1950 POP/1000	1950 POP/1000	3173
1949 MED. WAGE	1949 MED. WAGE	3346
1969 MED. WAGE	1969 MED. WAGE	3566
URBAN CLASS	URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	1950 URBAN AREA RANK	86
JAN MEAN TEMPERATURE	JAN MEAN TEMPERATURE	42
JULY MEAN TEMPERATURE	JULY MEAN TEMPERATURE	78
MEAN ANN. PRECIPITATION	MEAN ANN. PRECIPITATION	43
LAND RESOURCE REGION	LAND RESOURCE REGION	P
WATER SOURCE	WATER SOURCE	SURFACE
TOTAL HARDNESS	TOTAL HARDNESS	22 PPM
NON-CARBONATE HARDNESS	NON-CARBONATE HARDNESS	2 PPM
FLUORIDATION STATUS	FLUORIDATION STATUS	FLUORIDATED IN 1949

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	448	425	294	303	466	484	300	365	484	413	383	380
1-4	1700	1699	1226	1223	1840	1778	1304	1369	1571	1425	1447	1345
5-9	1551	1551	1141	1176	1970	1952	1558	1627	1948	1912	1824	1883
10-14	1182	1141	926	1048	1946	1947	1433	1476	2135	2113	1806	1927
15-19	2009	1916	978	1250	2459	2331	1175	1530	3078	2847	2602	2707
20-24	3260	2948	1171	1545	2724	2461	943	1221	3800	3962	1721	2603
25-29	2567	2331	1099	1290	2183	1714	786	911	2451	2285	1125	1273
30-34	1825	1814	952	1133	1560	1716	753	1110	1453	1434	779	967
35-39	1608	1830	974	1268	1661	1786	805	1013	1281	1406	714	947
40-44	1437	1675	856	1116	1491	1601	765	946	1451	1730	787	1075
45-49	1206	1373	744	913	1391	1625	746	958	1689	1869	850	1030
50-54	1046	1186	594	598	1286	1616	714	893	1535	1803	753	988
55-59	724	904	342	394	1033	1300	567	715	1424	1750	753	946
60-64	590	782	248	288	825	1112	373	480	1210	1632	633	911
65-69	432	642	210	273	617	877	293	387	1319	1319	507	739
70-74	286	466	114	156	457	727	203	246	608	1037	324	429
75-79*	224	396	81	156	233	472	108	122	365	649	169	239
80-84*	0	0	0	0	132	263	41	61	197	477	83	172
85-UP	30	46	17	24	70	184	32	76	125	312	76	110
TOTALS	22065	23125	11967	14154	23991	25906	12899	15506	27656	30375	16736	20671
GRAND TOTAL				71311				78302				95438

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1191.0	2202.0	2854.0		995.6	2045.7	1.076		995.6	2045.7	1.076	
CV-RENAL	587.0	1251.0	1433.0		464.5	1047.1	0.889		587.0	1251.0	1433.0	
HEART	358.0	927.0	990.0		319.0	716.3	0.907		358.0	927.0	990.0	
NON CV-R	604.0	951.0	1421.0		531.1	988.6	1.341		604.0	951.0	1421.0	
CANCER	158.0	300.0	500.0		147.2	306.5	0.979		158.0	300.0	500.0	
	OBS/EXP				OBS/EXP				OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	
	STATE	NORTH CAROLINA
1950 RANK BY POPULATION	166	5402
1970 POP/SQ. MILE	2608	3014
1949 MED. FAM. INCOME	8194	150
1969 MED. FAM. INCOME	41	78
URBAN CLASS	45	41
1950 URBAN AREA RANK	78	45
JAN MEAN TEMPERATURE	41	45
JULY MEAN TEMPERATURE	45	41
MEAN ANN. PRECIPITATION	41	45
LAND RESOURCE REGION	41	45
WATER SOURCE	41	45
TOTAL HARDNESS	41	45
NON-CARBONATE HARDNESS	41	45
FLUORIDATION STATUS	41	45

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
1-4	374	350	229	208	480	428	283	299
5-9	1269	1150	703	676	1547	1455	1054	1134
10-14	870	911	635	675	1326	1330	871	898
15-19	542	559	462	420	961	1297	651	853
20-24	1508	1598	563	521	1334	1602	538	798
25-29	1183	1504	561	521	1161	1150	538	695
30-34	1209	1820	624	793	1129	1182	492	649
35-39	1209	1900	533	513	1193	1270	499	602
40-44	842	717	500	565	988	980	438	504
45-49	578	621	310	374	797	784	399	423
50-54	451	469	261	313	545	671	240	306
55-59	383	371	232	235	457	545	230	291
60-64	277	283	140	154	381	445	164	195
65-69	190	255	121	126	276	332	147	185
70-74	159	206	113	149	166	240	79	125
75-79*	101	126	54	81	101	163	48	79
80-84*	62	145	36	61	42	94	22	33
85-up	0	0	0	0	22	64	14	29
TOTALS	10543	11185	6011	6976	14569	15646	7770	9121
GRAND TOTAL				34715				47106

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	587.0	433.0	1.356	1231.0	988.7	1.245	1672.0	1356.1	1.233
CV-RENAL	266.0	177.8	1.496	516.0	444.4	1.161	776.0	698.7	1.111
HEART	184.0	121.0	1.520	324.0	303.9	1.066	550.0	473.8	1.161
NON CV-R	321.0	255.2	1.258	715.0	544.3	1.314	896.0	657.4	1.363
CANCER	42.0	36.5	0.743	141.0	135.0	1.044	225.0	195.2	1.153

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	
TOTAL	299	288	587	1231	528	588	556	1672	STATE
HEART	131	135	266	516	272	272	252	776	1950 RANK BY POPULATION 351
NON CV-R	168	153	321	324	174	197	179	550	1950 POP/SQ. MILE 3616
CANCER	17	25	42	48	69	85	71	225	1970 POP/SQ. MILE 2287
									1949 MED. FAM. INCOME 2595
									1969 MED. FAM. INCOME 7361
									URBAN CLASS INDEPENDENT
									1950 URBAN AREA RANK -
									JAN MEAN TEMPERATURE 44
									JULY MEAN TEMPERATURE 79
									MEAN ANN. PRECIPITATION 47
									LAND RESOURCE REGION F
									WATER SOURCE SURFACE
									TOTAL HARDNESS 31 PPM
									NON-CARBONATE HARDNESS 16 PPM
									FLUORIDATION STATUS FLUORIDATED IN 1952

GREENSBORO
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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	WM	WF	NM	NF	WM	WF	NM	NF	WM	NF
IT 1	543	551	183	214			1000	952	409	410	899	830
1-4	2244	2105	729	787			4035	3911	1606	1624	3192	3089
5-9	2045	1963	723	816			4639	4446	1726	1785	4574	4397
10-14	1591	1622	613	633			4001	3909	1332	1489	4806	4651
15-19	1573	3259	815	916			2577	4285	1427	1630	4417	6114
20-24	2204	3930	1218	1454			2223	4020	1459	1560	3680	6358
25-29	2679	2884	968	974			3078	3371	1055	1097	3767	4048
30-34	2332	2866	718	962			3514	3770	950	1154	3061	3237
35-39	2057	2346	640	913			3453	3597	955	1103	2962	3125
40-44	1792	2045	591	746			2943	3038	943	1040	3235	3628
45-49	1522	1784	485	624			2376	2717	807	736	2662	3060
50-54	1352	1505	325	572			2024	2328	577	750	2203	2560
55-59	785	915	261	410			1262	1692	300	438	1608	1714
60-64	522	742	137	211			897	1311	271	319	1100	1773
65-69	343	519	76	108			633	971	167	215	844	1041
70-74	302	500	63	96			391	607	97	135	520	981
75-79	0	0	0	0			160	342	42	58	276	573
80-84	33	68	11	12			86	215	23	40	159	427
85-UP												
TOTALS	24854	30394	8739	10402	14681	16249	41029	47415	14681	16249	47083	55611
GRAND TOTAL				74389		119574						

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1149.0	2818.0	3499.0		999.2	2661.3	3668.8		999.2	2661.3	3668.8	
					1.150	1.059	0.940					
CV-RENAL												
	592.0	1471.0	1605.0									
	479.0	1310.3	1951.1									
					1.236	1.123	0.843					
HEART												
	397.0	935.0	1111.0									
	334.9	912.3	1359.9									
					1.185	1.014	0.829					
NON CV-R												
	557.0	1347.0	1804.0									
	520.2	1351.0	1717.7									
					1.071	0.997	1.050					
CANCER												
	144.0	405.0	552.0									
	154.2	402.4	545.6									
					0.934	1.006	1.012					

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1961	1960	1959		1971	1970	SUM	
TOTAL	575	574	1149		983	919	916		1127	1178	3449	
CV-RENAL	304	288	592		518	479	474		539	553	1092	
HEART	203	194	397		334	284	307		376	364	740	
NON CV-R	271	286	557		465	442	442		588	625	1213	
CANCER	67	77	144		144	119	142		183	199	382	

CITY CHARACTERISTICS

STATE	NORTH CAROLINA	
	1950 RANK BY POPULATION	153
1950 POP/50. MILE		4087
1970 POP/50. MILE		2648
1949 MED. FAM. INCOME		3505
1969 MED. FAM. INCOME		10166
URBAN CLASS		CENTRAL
1950 URBAN AREA RANK		137
JAN MEAN TEMPERATURE		39
JULY MEAN TEMPERATURE		77
MEAN ANN. PRECIPITATION		42
LAND RESOURCE REGION		P
WATER SOURCE		SURFACE
TOTAL HARDNESS		40 PPM
NON-CARBONATE HARDNESS		8 PPM
FLUORIDATION STATUS		UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NH	NP	WM	WP	NH	NP	WM	WP	NH	NP
IT-1	321	261	85	125	560	580	179	194	403	388	170	185
1-4	1338	1296	411	385	2231	2338	695	623	1553	1480	680	753
5-9	1281	1287	375	419	2479	2474	656	743	2181	2125	900	931
10-14	1126	1149	342	336	2332	2266	571	565	2224	2263	843	801
15-19	1157	1234	254	337	1850	1992	446	434	2061	2243	647	773
20-24	1368	1582	332	341	1695	1915	393	417	1766	2138	544	704
25-29	1409	1546	330	414	1755	1814	317	395	1636	1640	456	533
30-34	1243	1365	299	351	1854	1925	321	423	1424	1425	366	418
35-39	1282	1409	289	356	1744	1924	298	401	1299	1361	317	363
40-44	1141	1324	286	351	1621	1728	292	336	1500	1629	273	369
45-49	990	1088	288	277	1558	1699	281	330	1505	1731	254	388
50-54	802	905	227	214	1434	1625	259	319	1321	1539	245	296
55-59	559	651	138	128	1164	1239	230	238	1285	1506	226	275
60-64	419	503	87	84	762	989	146	165	1091	1418	164	248
65-69	330	409	67	95	582	734	126	138	812	1120	169	228
70-74	193	294	32	35	358	558	80	83	464	826	110	162
75-79	153	215	27	34	214	378	40	43	305	622	59	68
80-84	0	0	0	0	133	207	13	18	133	373	30	42
85-89	0	0	0	0	50	109	6	19	102	268	29	25
85-0P	17	42	8	3								
TOTALS	15139	16560	3887	4387	24376	26464	5349	5874	23065	26095	6482	7562
TOTAL TOTAL				39973				62063				63204

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

	CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE RANK BY POPULATION	NORTH CAROLINA
TOTAL		301	302	603	426	482	522	1430	554	620	604	1778	1950 POP./SQ. MILE	298
CYRICAL		167	155	322	284	316	316	770	316	316	915	1970 POP./SQ. MILE	2052	4079
HEART		114	89	203	155	170	195	520	197	209	226	632	1949 MED. FAN. INCOME	873
NOW CR-R		134	147	281	202	218	233	653	270	304	289	863	1968 MED. FAN. INCOME	873
CANCER		39	49	88	59	61	66	186	88	100	96	284	1950 DEATH AREA RANK	-
													JUN MEAN TEMPERATURE	39
													JULY MEAN TEMPERATURE	77
													MEAN ANN PRECIPITATION	42
													LAND RESOURCE REGION	P
													WATER SOURCE	SURFACE
													TOTAL HARDNESS	42 PPM
													NON-CARBONATE HARDNESS	10 PPM
													FLUORIDATION STATUS	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	407	408	185	157	718	712	256	260	757	726	214	246
1-4	1565	1525	717	695	2794	2711	1025	973	2700	2562	1044	969
5-9	1533	1432	653	709	3107	3105	1162	1256	3805	3630	1408	1334
10-14	1140	1167	579	661	2775	2662	1052	1036	3768	3693	1433	1423
15-19	1811	2024	709	891	3335	2938	819	1034	5658	5053	1538	1744
20-24	3531	3005	965	1151	3950	3331	810	974	6650	5690	1688	1750
25-29	2822	2425	826	840	3050	2856	729	811	4077	3946	1058	953
30-34	2013	2075	645	761	2804	2735	678	903	2780	2780	781	767
35-39	1913	1916	689	810	2661	2827	685	776	2602	2637	665	772
40-44	1618	1772	642	655	2270	2408	633	798	2685	2876	651	855
45-49	1416	1593	496	602	2049	2109	600	699	2745	2902	651	734
50-54	1181	1332	448	463	1681	1969	515	596	2195	2395	583	722
55-59	961	987	277	327	1368	1715	449	522	1763	2043	571	672
60-64	663	848	202	241	1039	1316	262	393	1380	1807	419	566
65-69	510	637	193	268	810	1053	243	344	949	1537	343	511
70-74	283	447	86	118	513	852	152	257	638	1175	245	362
75-79	242	424	75	151	332	532	122	154	421	827	114	208
80-84	0	0	0	0	152	299	40	53	236	501	79	135
85-UP	27	82	18	39	78	156	23	65	133	335	71	111
TOTALS	23636	24099	8405	9539	35486	36286	10255	11904	46064	47115	13564	14834
GRAND TOTAL				65679				93931				121577

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DENSITY RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1080.0	2048.0	1.137		949.7	2221.7	1.137		949.7	2221.7	1.137	
CV-RENAL	528.0	1074.0	1.131		467.0	1130.8	1.131		467.0	1130.8	1.131	
HEART	330.0	740.0	1.019		323.9	784.5	1.019		323.9	784.5	1.019	
NON CV-R	552.0	974.0	1.144		482.7	1090.9	1.144		482.7	1090.9	1.144	
CANCER	125.0	272.0	0.859		145.6	339.6	0.859		145.6	339.6	0.859	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

NORTH CAROLINA

STATE

1950 RANK BY POPULATION

1950 POP/50. MILE

1970 POP/50. MILE

1949 MED. FAM. INCOME

1969 MED. FAM. INCOME

URBAN CLASS

1950 URBAN AREA RANK

JAN MEAN TEMPERATURE

JULY MEAN TEMPERATURE

MEAN ANN. PRECIPITATION

LAND RESOURCE REGION

WATER SOURCE

TOTAL HARDNESS

NON-CARBONATE HARDNESS

FLUORIDATION STATUS

SURFACE

5 PPM

FLUORIDATED IN 1957

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	303	252	161	173	270	247	198	202	262	271	153	152
1-4	1256	1285	808	792	1024	1015	850	821	881	930	633	633
5-9	1359	1268	852	873	1228	1159	1055	1085	1261	1241	876	879
10-14	939	993	665	707	1259	1281	1055	1085	1233	1203	1005	974
15-19	857	1021	508	568	1079	1065	882	758	1288	1316	885	928
20-24	933	1305	476	751	1045	1045	325	493	1267	1500	471	605
25-29	1362	1552	602	829	849	859	375	466	1154	1107	313	450
30-34	1162	1275	659	703	783	933	367	573	729	752	252	404
35-39	1336	1275	659	703	936	1003	479	690	704	743	248	442
40-44	1336	1275	659	703	936	1003	479	690	704	743	248	442
45-49	788	904	411	492	852	959	535	637	757	930	317	481
50-54	674	857	347	353	729	890	381	467	942	1073	415	591
55-59	578	634	232	239	608	774	279	375	802	1025	474	564
60-64	423	554	184	229	478	702	205	303	817	970	451	467
65-69	366	492	167	230	429	591	172	257	646	904	276	367
70-74	258	347	81	149	293	457	130	171	465	729	187	358
75-79	196	324	69	114	173	329	85	107	328	628	148	228
80-84	0	0	0	0	99	152	26	55	112	234	36	77
85-UP	26	54	11	27	41	91	25	36	65	153	35	65
TOTALS	13611	15294	7371	8767	12935	14460	7550	9068	13993	16122	7252	8802
GRAND TOTAL				45043				44013				46169

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL		495.0	779.0	826.0								
		356.3	662.3	841.1								
		1.389	1.176	0.982								
HEART		315.0	500.0	558.0								
		244.6	452.6	572.7								
		1.288	1.105	0.974								
NON CV-R		481.0	781.0	914.0								
		358.2	599.2	674.3								
		1.343	1.303	1.355								
CANCER		110.0	199.0	267.0								
		106.8	189.3	228.6								
		1.030	1.052	1.168								

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1950				1959-61				1969-71			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	473	503	976	976	464	566	530	1560	619	593	528	1740
CV-RENAL	242	253	495	495	219	273	287	779	296	270	260	826
HEART	157	158	315	315	152	162	186	500	198	180	180	558
NON CV-R	231	250	481	481	245	293	243	781	323	323	268	914
CANCER	47	63	110	110	62	74	63	199	79	102	86	267

CITY CHARACTERISTICS		CODE	
STATE	NORTH CAROLINA		
1950 RANK BY POPULATION	284		
1950 POP./SQ. MILE	5927		
1970 POP./SQ. MILE	2638		
1949 MED. FAM. INCOME	2241		
1969 MED. FAM. INCOME	6986		
URBAN CLASS	INDEPENDENT		
1950 URBAN AREA RANK	-		
JAN MEAN TEMPERATURE	47		
JULY MEAN TEMPERATURE	80		
MEAN ANN. PRECIPITATION	49		
WATER RESERVE REGION	4		
WATER RESERVE	SURFACE		
TOPOG. INDEX	34		
NO. ACRES HARDNESS	9		
FLUORIDATION STATUS	9		
FLUORIDATED IN 1955			

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				
	WM	WF	NH	NP	
LT 1	538	467	438	451	
5-9	276	2061	1769	1763	
10-14	1263	1898	1703	1728	
15-19	1672	1658	1465	1530	
20-24	1672	1952	1293	1523	
25-29	2087	2644	1375	1776	
30-34	2508	2730	1317	1610	
35-39	2171	2256	1218	1576	
40-44	1903	2039	1327	1786	
45-49	1650	1953	1257	1539	
50-54	1471	1865	1131	1412	
55-59	1381	1563	982	1160	
60-64	1115	1188	640	637	
65-69	734	900	434	422	
70-74	501	681	352	473	
75-79	291	450	111	224	
80-84	306	446	129	207	C
85-UP	0	0	32	40	
TOTALS	23976	27075	17003	19757	
GRAND TOTAL				87811	

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	1716.0	3141.0	4012.0
EXPECTED*	1338.1	2756.4	3844.9
OBS/EXP	1.282	1.135	1.043
CV-BENAL			
OBSERVED	886.0	1619.0	2148.0
EXPECTED*	633.4	1365.5	2084.1
OBS/EXP	1.399	1.186	1.031
HEART			
OBSERVED	588.0	1039.0	1523.0
EXPECTED*	431.8	934.4	1418.6
OBS/EXP	1.362	1.112	1.074
NON CV-R			
OBSERVED	830.0	1522.0	1864.0
EXPECTED*	704.7	1400.9	1767.8
OBS/EXP	1.178	1.086	1.059
CANCER			
OBSERVED	209.0	418.0	613.0
EXPECTED*	197.1	413.3	576.9
OBS/EXP	1.061	1.011	1.063

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM
TOTAL	857	859	1716	1017	1026	1098	3141
CV-R	491	475	966	521	544	554	1619
HEP-R	287	301	588	304	363	372	1039
NON CV-R	415	414	830	496	482	545	1522
CV-R	107	102	209	122	131	165	418

CITY CHARACTERISTICS

STATE	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000	3010	3020	3030	3040	3050	3060	3070	3080	3090	3100	3110	3120	3130	3140	3150	3160	3170	3180	3190	3200	3210	3220	3230	3240	3250	3260	3270	3280	3290	3300	3310	3320	3330	3340	3350	3360	3370	3380	3390	3400	3410	3420	3430	3440	3450	3460	3470	3480	3490	3500	3510	3520	3530	3540	3550	3560	3570	3580	3590	3600	3610	3620	3630	3640	3650	3660	3670	3680	3690	3700	3710	3720	3730	3740	3750	3760	3770	3780	3790	3800	3810	3820	3830	3840	3850	3860	3870	3880	3890	3900	3910	3920	3930	3940	3950	3960	3970	3980	3990	4000	4010	4020	4030	4040	4050	4060	4070	4080	4090	4100	4110	4120	4130	4140	4150	4160	4170	4180	4190	4200	4210	4220	4230	4240	4250	4260	4270	4280	4290	4300	4310	4320	4330	4340	4350	4360	4370	4380	4390	4400	4410	4420	4430	4440	4450	4460	4470	4480	4490	4500	4510	4520	4530	4540	4550	4560	4570	4580	4590	4600	4610	4620	4630	4640	4650	4660	4670	4680	4690	4700	4710	4720	4730	4740	4750	4760	4770	4780	4790	4800	4810	4820	4830	4840	4850	4860	4870	4880	4890	4900	4910	4920	4930	4940	4950	4960	4970	4980	4990	5000	5010	5020	5030	5040	5050	5060	5070	5080	5090	5100	5110	5120	5130	5140	5150	5160	5170	5180	5190	5200	5210	5220	5230	5240	5250	5260	5270	5280	5290	5300	5310	5320	5330	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430	5440	5450	5460	5470	5480	5490	5500	5510	5520	5530	5540	5550	5560	5570	5580	5590	5600	5610	5620	5630	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730	5740	5750	5760	5770	5780	5790	5800	5810	5820	5830	5840	5850	5860	5870	5880	5890	5900	5910	5920	5930	5940	5950	5960	5970	5980	5990	6000	6010	6020	6030	6040	6050	6060	6070	6080	6090	6100	6110	6120	6130	6140	6150	6160	6170	6180	6190	6200	6210	6220	6230	6240	6250	6260	6270	6280	6290	6300	6310	6320	6330	6340	6350	6360	6370	6380	6390	6400	6410	6420	6430	6440	6450	6460	6470	6480	6490	6500	6510	6520	6530	6540	6550	6560	6570	6580	6590	6600	6610	6620	6630	6640	6650	6660	6670	6680	6690	6700	6710	6720	6730	6740	6750	6760	6770	6780	6790	6800	6810	6820	6830	6840	6850	6860	6870	6880	6890	6900	6910	6920	6930	6940	6950	6960	6970	6980	6990	7000	7010	7020	7030	7040	7050	7060	7070	7080	7090	7100	7110	7120	7130	7140	7150	7160	7170	7180	7190	7200	7210	7220	7230	7240	7250	7260	7270	7280	7290	7300	7310	7320	7330	7340	7350	7360	7370	7380	7390	7400	7410	7420	7430	7440	7450	7460	7470	7480	7490	7500	7510	7520	7530	7540	7550	7560	7570	7580	7590	7600	7610	7620	7630	7640	7650	7660	7670	7680	7690	7700	7710	7720	7730	7740	7750	7760	7770	7780	7790	7800	7810	7820	7830	7840	7850	7860	7870	7880	7890	7900	7910	7920	7930	7940	7950	7960	7970	7980	7990	8000	8010	8020	8030	8040	8050	8060	8070	8080	8090	8100	8110	8120	8130	8140	8150	8160	8170	8180	8190	8200	8210	8220	8230	8240	8250	8260	8270	8280	8290	8300	8310	8320	8330	8340	8350	8360	8370	8380	8390	8400	8410	8420	8430	8440	8450	8460	8470	8480	8490	8500	8510	8520	8530	8540	8550	8560	8570	8580	8590	8600	8610	8620	8630	8640	8650	8660	8670	8680	8690	8700	8710	8720	8730	8740	8750	8760	8770	8780	8790	8800	8810	8820	8830	8840	8850	8860	8870	8880	8890	8900	8910	8920	8930	8940	8950	8960	8970	8980	8990	9000	9010	9020	9030	9040	9050	9060	9070	9080	9090	9100	9110	9120	9130	9140	9150	9160	9170	9180	9190	9200	9210	9220	9230	9240	9250	9260	9270	9280	9290	9300	9310	9320	9330	9340	9350	9360	9370	9380	9390	9400	9410	9420	9430	9440	9450	9460	9470	9480	9490	9500	9510	9520	9530	9540	9550	9560	9570	9580	9590	9600	9610	9620	9630	9640	9650	9660	9670	9680	9690	9700	9710	9720	9730	9740	9750	9760	9770	9780	9790	9800	9810	9820	9830	9840	9850	9860	9870	9880	9890	9900	9910	9920	9930	9940	9950	9960	9970	9980	9990	10000
NORTH CAROLINA	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127																																																																																																																																																																																																																																																																																																																														

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	460	442	1	2	583	592	2	7
1-4	1588	1466	7	1	2150	2102	21	18
5-9	1396	1465	0	1	2552	2451	17	14
10-14	1144	1077	2	1	2051	1973	22	19
15-19	1230	1639	2	1	1903	2185	6	7
20-24	2045	2193	4	6	1837	2015	9	10
25-29	1720	1569	5	6	1477	1491	11	12
30-34	1365	1448	3	3	1484	1465	7	11
35-39	1267	1339	3	1	1372	1397	11	6
40-44	1130	1178	1	1	1296	1400	6	4
45-49	1054	1225	3	0	1173	1247	3	1
50-54	1033	1176	3	0	1039	1105	3	1
55-59	974	957	3	1	902	1114	3	0
60-64	831	831	0	0	830	1035	0	1
65-69	644	598	0	0	697	855	1	0
70-74	354	391	0	0	574	676	0	2
75-79*	379	420	1	0	371	412	0	0
80-84*	0	0	0	0	165	207	0	0
85-UP	68	95	0	0	94	164	0	0
TOTALS	18682	19509	38	27	22550	23886	123	103
GRAND TOTAL				38256				46662

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	670.0	1077.0	1173.0
EXPECTED*	658.1	1256.4	1552.5
OBS/EXP	1.018	0.857	0.756
CV-RENAL			
OBSERVED	377.0	566.0	617.0
EXPECTED*	355.2	691.8	905.4
OBS/EXP	1.061	0.818	0.681
HEART			
OBSERVED	217.0	375.0	434.0
EXPECTED*	255.9	493.2	631.4
OBS/EXP	0.848	0.760	0.687
NON CV-E			
OBSERVED	293.0	511.0	556.0
EXPECTED*	302.9	564.6	647.1
OBS/EXP	0.967	0.905	0.859
CANCER			
OBSERVED	95.0	182.0	227.0
EXPECTED*	106.8	198.3	231.3
OBS/EXP	0.890	0.919	0.981

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	1959	1960	1961	59-61 SUM
TOTAL	340	330	352	359	366	1077
CV-REMAL	190	187	189	172	566	1077
HEART	119	98	118	119	138	375
NON CV-R	150	143	163	167	161	511
CANCER	45	50	51	71	60	182

CITY CHARACTERISTICS

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	322	307	1	2	493	535	9	3	401	382	19	13
1-4	1293	1344	13	10	1788	1786	32	39	1322	1264	25	22
5-9	1447	1033	10	7	1803	1680	21	23	1784	1747	27	17
10-14	868	848	4	5	1421	1405	15	7	1749	1756	20	15
15-19	1073	1183	7	3	1529	1611	11	10	2335	2538	22	35
20-24	1713	1713	7	10	2005	1994	28	26	3362	3101	56	40
25-29	1345	1183	7	10	1389	1269	48	31	1509	1268	29	29
30-34	953	902	4	3	937	910	10	16	943	955	24	17
35-39	801	835	5	1	825	844	18	3	965	823	11	8
40-44	707	723	3	4	825	844	18	3	965	823	11	8
45-49	621	709	3	4	779	803	2	3	856	889	6	12
50-54	634	674	3	3	672	687	3	0	718	784	5	6
55-59	578	628	3	3	559	661	2	5	647	718	4	1
60-64	500	479	3	0	504	600	0	2	535	608	5	3
65-69	368	378	1	1	438	590	2	1	401	552	5	1
70-74	206	231	0	0	345	413	1	0	316	509	2	4
75-79*	216	258	0	0	252	269	0	0	209	378	0	2
80-84*	55	61	0	0	98	163	0	0	108	230	0	1
85-UP	55	61	0	0	57	112	0	0	104	171	1	1
TOTALS	13425	13284	66	61	16986	17106	183	176	19002	19513	262	231
GRAND TOTAL				26836				34451				39008

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970				69-71	
	1949	1950	49-50	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM	SUM	
TOTAL	212	237	449		231	271	290	792	303	294	283	880	880	
CV-RENAL	24	14	208		127	124	137	394	137	146	151	434	434	
HEART	52	77	123		93	85	93	271	98	95	106	299	299	
NON-CV-R	118	123	241		104	147	147	398	166	148	132	446	446	
CANCER	23	22	45		29	33	39	101	54	39	47	140	140	

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	LAND RECLAMATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
NORTH DAKOTA	457	6709	4240	3550	9109	INDEPENDENT	-	3	68	19	P	SURFACE	96 PPM	55 PPM	FLUORIDATED IN 1958

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	OBSERVED 449.0 EXPECTED* 412.2 OBS/EXP 1.089	792.0 842.5 0.940	880.0 970.3 0.907
CV-RENAL	OBSERVED 208.0 EXPECTED* 217.9 OBS/EXP 0.955	394.0 448.3 0.879	434.0 547.9 0.799
HEART	OBSERVED 129.0 EXPECTED* 156.3 OBS/EXP 0.825	271.0 318.4 0.851	299.0 379.1 0.789
NON CV-R	OBSERVED 241.0 EXPECTED* 194.2 OBS/EXP 1.241	398.0 394.1 1.010	446.0 427.4 1.044
CANCER	OBSERVED 45.0 EXPECTED* 65.2 OBS/EXP 0.690	101.0 127.5 0.792	140.0 142.1 0.985

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	2848	2648	324	325	2775	2730	596	540
1-4	1143	1081	1378	1245	10882	10773	2337	2286
5-9	9748	9852	1108	1683	12319	11912	2506	2592
10-14	7271	7372	917	923	11145	11004	1999	2058
15-19	6870	7693	792	904	7361	8325	1319	1355
20-24	8926	10439	843	1122	6631	7951	993	1279
25-29	11105	12258	1107	1309	7504	7466	1205	1375
30-34	9789	10480	979	1106	8264	8217	1263	1480
35-39	8459	9426	983	1000	8684	9382	1333	1480
40-44	8111	9077	832	776	7877	8738	1107	1201
45-49	8012	8475	775	747	7199	7959	995	1032
50-54	8472	8400	671	545	6740	7538	811	749
55-59	7901	7318	527	360	6538	7348	743	684
60-64	6147	5349	257	189	6384	6660	588	507
65-69	3834	3973	205	214	5409	5841	402	391
70-74	2175	2642	96	104	3688	3883	179	211
75-79*	1781	2526	94	92	1870	2471	100	134
80-84*	0	0	0	0	769	1202	39	46
85-UP	285	440	19	24	349	689	32	47
TOTALS	122418	128309	11807	12071	122388	130069	18447	19447
GRAND TOTAL				274605				290351

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	4765.0	4494.0	1.066	6584.0	8297.6	0.952
CV-RENAL	2430.0	2322.0	1.047	4605.0	4456.1	0.857
HEART	1694.0	1683.6	1.006	3305.0	3723.8	0.886
NON CV-R	2335.0	2172.1	1.075	3979.0	3841.4	1.036
CANCER	787.0	746.2	1.055	1551.0	1430.4	1.082

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	OHIO
1950 RANK BY POPULATION	3914
1950 POP/50. MILE	3082
1970 POP/50. MILE	3082
1949 MED. FAM. INCOME	12051
1969 MED. FAM. INCOME	12051
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	50
JULY MEAN TEMPERATURE	72
JULY MEAN PRECIPITATION	37
MEAN ANN. PRECIPITATION	37
LAND RESOURCES REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	106 PPM
NON-CARBONATE HARDNESS	47 PPM
FLUORIDATION STATUS	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NH	NF	NM	NF	WM	WF	NH	NF	NM	NF	WM	WF	NH	NF	NM	NF
LT 1	224	231	38	38			271	253	39	33			212	222	40	40		
1-4	941	915	137	115			1108	1039	168	157			757	734	110	115		
5-9	970	882	127	121			1165	1254	201	191			1007	925	156	155		
10-14	666	757	107	111			1104	1012	171	161			1046	1045	196	189		
15-19	688	759	84	98			927	1024	126	116			1251	1251	185	192		
20-24	945	1007	103	103			732	884	85	104			1116	1150	101	110		
25-29	1037	1134	108	104			622	688	86	83			719	691	69	85		
30-34	950	931	92	98			778	848	104	102			526	537	29	71		
35-39	830	889	81	77			873	820	99	84			500	500	88	78		
40-44	740	794	49	62			732	781	67	64			500	500	98	94		
45-49	617	664	59	49			627	736	67	64			709	709	93	78		
50-54	628	691	61	51			580	641	54	59			679	716	54	80		
55-59	552	587	60	36			540	601	49	50			598	716	53	50		
60-64	460	508	28	19			525	609	37	53			500	643	43	55		
65-69	460	508	14	19			487	564	39	21			358	554	40	50		
70-74	329	412	12	3			373	459	16	21			319	500	17	32		
75-79	299	397	4	11			234	358	11	8			262	370	25	20		
80-84	0	6	0	0			116	204	8	4			126	231	10	9		
85-UP	36	66	2	6			79	132	7	8			78	168	1	4		
TOTALS	11576	12291	1158	1136			12207	13302	1438	1415			11168	12477	1394	1508		
GRAND TOTAL				26161						28362						26547		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	566.0	519.1	1.090	983.0	929.9	1.057	984.0	948.7	1.037
CV-RENAL	270.0	267.7	0.938	593.0	532.7	1.113	570.0	556.2	1.025
HEART	204.0	204.9	0.996	384.0	373.2	1.029	380.0	386.3	0.984
NON CV-R	296.0	231.4	1.279	390.0	397.2	0.982	414.0	392.5	1.055
CANCER	82.0	83.1	0.987	139.0	142.4	0.976	138.0	143.1	0.965

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS		CODE
	1949	1950	49-50 SUM	1959	1960	59-61 SUM	1969	1970	
TOTAL	278	288	566	310	329	639	344	321	OHIO
CV-RENAL	137	133	270	165	204	369	179	211	1950 RANK BY POPULATION 462
HEART	99	105	204	102	130	232	118	149	1950 POB/SQ. MILE 5687
NON CV-R	141	155	296	145	120	265	165	110	1970 POB/SQ. MILE 4282
CANCER	43	39	82	50	35	85	54	38	1949 MED. FAM. INCOME 3404
									1969 MED. FAM. INCOME 9355
									URBAN CLASS INDEPENDENT
									1950 MED. AREA RANK 27
									JULY MEAN TEMPERATURE 77
									JULY MEAN PRECIPITATION 32
									MEAN ANNUAL PRECIPITATION 37
									LAND RESOURCE REGION R
									WATER SOURCE SURFACE
									TOTAL HARDNESS 83 PPM
									NON-CARBONATE HARDNESS 50 PPM
									FLUORIDATION STATUS NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			WF			WM			WF			WM			WF		
	NM	NP	SUM	NM	NP	SUM	NM	NP	SUM	NM	NP	SUM	NM	NP	SUM	NM	NP	SUM
IT 1	336	320	20	421	385	27	22	22	22	308	293	15	24	24	24	15	24	24
1-4	1363	1220	75	1584	1545	107	99	99	99	1107	1111	57	63	63	63	57	63	63
5-9	1065	1073	94	1697	1734	107	99	99	99	1467	1398	86	84	84	84	86	84	84
10-14	915	850	63	1592	1553	86	83	83	83	1636	1542	94	80	80	80	94	80	80
15-19	759	862	37	949	1088	72	68	68	68	1457	1531	94	67	67	67	94	67	67
20-24	965	1163	42	941	1097	45	55	55	55	1235	1478	42	53	53	53	42	53	53
25-29	1244	1285	38	1023	990	44	42	42	42	1010	933	37	42	42	42	1010	933	37
30-34	1102	1135	46	1146	1145	45	61	61	61	750	773	30	47	47	47	750	773	30
35-39	991	1013	29	1153	1214	35	39	39	39	728	765	27	34	34	34	728	765	27
40-44	863	900	28	1043	1106	41	42	42	42	914	1021	29	44	44	44	914	1021	29
45-49	777	712	31	924	961	34	27	27	27	1018	1065	25	36	36	36	1018	1065	25
50-54	719	671	32	780	829	29	20	20	20	923	1017	29	35	35	35	923	1017	29
55-59	670	655	23	711	698	31	24	24	24	773	899	31	29	29	29	773	899	31
60-64	658	540	26	591	627	25	25	25	25	642	758	22	18	18	18	642	758	22
65-69	431	406	13	466	588	19	17	17	17	455	578	15	21	21	21	455	578	15
70-74	245	257	2	427	456	14	8	8	8	355	515	18	15	15	15	355	515	18
75-79#	194	210	5	221	276	9	6	6	6	238	370	4	14	14	14	238	370	4
80-84#	0	0	0	81	130	2	4	4	4	164	254	5	3	3	3	164	254	5
85-89	22	36	1	42	75	1	2	2	2	70	121	9	2	2	2	70	121	9
TOTALS	13319	13308	605	15792	16497	773	743	743	743	15250	16422	669	711	711	711	15250	16422	669
GRAND TOTAL			27820			33805			33805			33052			33052			33052

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	499.0	427.7	1.167	886.0	855.7	1.035	1052.0	995.7	1.057
CV-RENAL	257.0	218.2	1.178	467.0	454.8	1.027	576.0	567.3	1.015
HEART	182.0	159.5	1.141	337.0	327.0	1.031	415.0	400.6	1.036
NON CV-R	242.0	203.5	1.155	419.0	400.8	1.045	476.0	428.4	1.111
CANCER	80.0	70.9	1.128	179.0	138.1	1.296	194.0	157.2	1.234

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CODE				
	1949	1950	1959	1960	1961	1969	1970	1971	69-71 SUM	OHIO
TOTAL	243	256	285	318	283	344	339	369	1052	STATE 1950 RANK BY POPULATION 441
CV-RENAL	115	142	143	169	155	198	195	183	576	1950 POP/SQ. MILE 4715
HEART	79	103	100	126	111	142	140	133	415	1970 POP/SQ. MILE 4349
NON CV-R	128	114	142	149	128	166	144	186	476	1949 MED. FAM. INCOME 3415
CANCER	38	42	58	62	59	63	63	72	194	1969 MED. FAM. INCOME 9455
										URBAN CLASS PRINGE
										1950 URBAN AREA RANK 36
										JAN MEAN TEMPERATURE 27
										JULY MEAN TEMPERATURE 72
										MEAN ANN. PRECIPITATION 37
										LAND RESOURCE REGION R
										WATER SOURCE
										TOTAL HARDNESS
										NON-CARBONATE HARDNESS 124 PPM
										FLUORIDATION STATUS 58 PPM
										GROUND AND SURFACE NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NP	WM	WF	NH	NP
LT 1	1222	1076	75	85	1112	1091	170	168
5-9	4362	4181	371	307	4287	4113	686	665
10-14	3891	3866	326	302	4782	4585	736	759
15-19	3338	3370	272	266	4286	4229	591	559
20-24	3034	3447	250	265	3093	3714	368	409
25-29	3957	4673	287	322	2866	3514	303	400
30-34	4890	5193	325	357	2806	2831	327	367
35-39	4290	4478	256	320	3196	3321	390	420
40-44	3833	4066	287	339	3301	3550	357	440
45-49	3413	3631	270	273	3151	3502	323	338
50-54	3261	3513	274	236	2948	3179	268	317
55-59	3537	3333	247	151	2572	2954	254	253
60-64	3376	3146	159	84	2555	2878	219	217
65-69	2686	2568	59	60	2429	2664	196	144
70-74	2043	2145	52	58	2429	2596	120	107
75-79*	1255	1600	23	29	1675	1939	62	62
80-84*	1136	1418	27	24	1020	1401	37	46
85-UP	163	295	1	7	484	736	18	15
TOTALS	53757	55999	3561	3595	49259	53225	5432	5715
GRAND TOTAL				116942				113631

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	1959	SUM	1960	1961	SUM	69-71 SUM
TOTAL	1295	1274	1334	2569	1437	1289	4060	4384
CV-RENAL	619	647	764	1266	794	771	2329	2464
HEART	417	437	527	854	539	545	1611	1804
NON CV-R	676	627	1303	1903	643	518	1731	1920
CANCER	209	207	225	416	237	200	662	744

CITY CHARACTERISTICS

STATE	OHIO
1950 RANK BY POPULATION	88
1950 POP/SQ. MILE	8292
1970 POP/SQ. MILE	5792
1949 MED. FAM. INCOME	3301
1969 MED. FAM. INCOME	9343
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	71
JAN MEAN TEMPERATURE	27
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	37
LAND RESOURCE REGION	R
WATER SOURCE	GROUND
TOTAL HARDNESS	413 PPM
NON-CARBONATE HARDNESS	158 PPM
FLUORIDATION STATUS	UNCERTAIN

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	2569.0	2187.1	1.175		4060.0	3795.3	1.070		4384.0	4153.9	1.055	
CV-RENAL	1266.0	1192.1	1.062		2329.0	2149.9	1.083		2464.0	2459.2	1.002	
HEART	854.0	857.7	0.996		1611.0	1522.4	1.058		1804.0	1706.8	1.057	
NON CV-R	1303.0	1310.0	1.002		1731.0	1645.5	1.052		1920.0	1694.7	1.133	
CANCER	416.0	358.2	1.161		662.0	599.7	1.104		744.0	627.4	1.186	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	NM	NP
1-4	4367	4169	952	851
5-9	16050	15774	3030	3108
10-14	14625	14098	3119	2832
15-19	12222	12135	2765	2614
20-24	11660	11390	2366	2838
25-29	15460	18213	2695	3644
30-34	16918	18178	3111	3966
35-39	14536	15790	2879	3805
40-44	14165	16041	3236	3523
45-49	14222	15850	3113	3335
50-54	13364	14549	2827	2897
55-59	12912	14280	2339	2289
60-64	11787	13103	1647	1481
65-69	10081	11460	1164	1157
70-74	7903	9952	985	1664
75-79	5546	7466	510	550
80-84	5032	7790	458	465
85-89	0	0	0	0
90-94	818	1516	80	110
TOTALS	201698	223615	37176	41509
GRAND TOTAL	209938	229958		50398

1960	NP	NM	NP	NP
4421	4331	1564	1593	
16245	15762	6191	6211	
16836	16567	6381	6491	
15245	14758	4844	4801	
12346	13698	3322	3737	
12946	14765	2807	3707	
12222	11954	3129	4169	
11331	11779	3565	4456	
11032	12336	3430	4272	
10292	12171	3102	3855	
10817	12842	3521	3521	
10936	12872	2760	2966	
10340	11924	2447	2563	
9102	11267	1901	1949	
7897	10442	1397	1518	
6047	8697	958	965	
3802	6115	559	627	
1915	3457	196	317	
1085	2234	192	190	
184957	207911	51774	57908	
			502550	

1970	CAUSE	TOTAL
	NP	
1251	1368	
5232	5130	
7266	7417	
7463	7767	
5869	6498	
4017	5357	
3432	4225	
2921	3822	
2908	3964	
3128	4150	
2963	3870	
2727	3527	
2627	3136	
2227	2673	
1945	2299	
1245	1536	
699	927	
388	514	
274	368	
50582	68548	
	452524	

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	1256.3-0	18609-0	18167-0
EXPECTED*	10566-9	17690-1	17573-5
OS/EXP	1.189	1.052	1.034
CVU-RENAL			
OBSERVED	6492-0	10044-0	9474-0
EXPECTED*	5809-6	9933-1	10277-9
OS/EXP	1.110	1.011	0.922
HEART			
OBSERVED	4445-0	7010-0	7198-0
EXPECTED*	4117-4	6895-6	7000-3
OS/EXP	1.080	1.017	1.028
NON CV-R			
OBSERVED	6071-0	8565-0	8603-0
EXPECTED*	4717-4	7757-0	7295-6
OS/EXP	1.287	1.104	1.192

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS					CODE	
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971		69-71 SUM
TOTAL	6373	6190	12563	6258	6254	6097	18609	6261	6057	5849	18167	STATE
CV-RENAL	3285	3207	6492	3415	3307	3322	10044	3233	3385	3056	9474	1950 RANK BY POPULATION
HEART	2306	2239	4445	2390	2313	2317	7010	2458	2398	2342	7196	1970 POP/SQ. MILE
NON CV-R	3088	2883	6071	2863	2947	2775	8565	3028	2872	2793	8693	1949 MED. FAM. INCOME
CANCER	1005	996	2001	1084	1110	1064	3258	1168	1136	1127	3451	1969 MED. FAM. INCOME
												URBAN CLASS
												1950 URBAN AREA RANK
												34
												JAN MEAN TEMPERATURE
												78
												MEAN ANN. PRECIPITATION
												39
												LAND RESOURCE REGION
												WATER SOURCE
												SURFACE
												TOTAL HARDNESS
												115 PPM
												NON-CARBONATE HARDNESS
												71 PPM
												FLUORIDATION STATUS
												NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				
	WM	WP	NM	NP	
1	7891	7595	1895	1831	
1-4	30434	29481	6258	6261	
5-9	27173	26383	5752	5841	
10-14	26434	26241	4891	5151	
15-19	19514	21266	4493	4494	
20-24	27376	21766	5735	7235	
25-29	34174	36619	7359	8663	
30-34	32669	30393	6615	7233	
35-39	29970	31474	6410	6928	
40-44	25898	27042	5358	5535	
45-49	22624	23697	5202	5668	
50-54	22367	23922	4091	4911	
55-59	23459	22931	3111	2820	
60-64	20740	18898	3151	1937	
65-69	15047	16911	1480	1643	
70-74	8747	9250	657	798	
75-79*	6469	8123	595	710	
80-84*	0	0	0	0	
85-9	892	1355	97	173	
TOTALS	375868	389396	72502	77042	
GRAND TOTAL					914608

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	19810.0	30444.0	27771.0
EXPECTED*	16254.4	26991.3	26124.1
OBS/EXP	1.219	1.128	1.063
CV-RENAL			
OBSERVED	9944.0	15711.0	13943.0
EXPECTED*	8466.2	14314.0	14620.4
OBS/EXP	1.175	1.098	0.954
HEART			
OBSERVED	7308.0	11634.0	10507.0
EXPECTED*	6075.5	10035.4	9961.6
OBS/EXP	1.203	1.159	1.055
NON CV-R			
OBSERVED	9866.0	14733.0	13828.0
EXPECTED*	7788.2	12677.2	11503.7
OBS/EXP	1.267	1.162	1.202
CANCER			
OBSERVED	3205.0	5242.0	4831.0
EXPECTED*	2664.3	4158.4	3829.9
OBS/EXP	1.203	1.261	1.261

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

	1949	1950	49-50 SUM	1959	1960	1961	50-61 SUM	1970	1971	69-71 SUM
TOTAL	10084	9726	19810	10271	10180	9993	30444	9488	9021	27771
CL- R	4946	4998	9944	5310	5156	5295	15711	4686	4590	13943
HEART	3633	3675	7308	3866	3951	3917	11634	3479	3507	10507
CL- R	5138	4986	9966	4961	5024	4748	11733	4595	4431	13828
CANCER	1629	1576	3205	1718	1751	1773	5243	1609	1561	4831

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	OHIO
ALABAMA	12197	7
ALASKA	1950 POP./SQ. MILE	
ARIZONA	1970 POP./SQ. MILE	
ARKANSAS	1950 POP./SQ. MILE	
CALIFORNIA	35313 1949 MED. FAM. INCOME	
COLORADO	1969 MED. FAM. INCOME	
CONNECTICUT	1970 MED. FAM. INCOME	
DELAWARE	1969 MED. FAM. INCOME	
FLORIDA	1970 MED. FAM. INCOME	
GEORGIA	1969 MED. FAM. INCOME	
ILLINOIS	1970 MED. FAM. INCOME	
INDIANA	1969 MED. FAM. INCOME	
IOWA	1970 MED. FAM. INCOME	
KANSAS	1969 MED. FAM. INCOME	
KENTUCKY	1970 MED. FAM. INCOME	
LOUISIANA	1969 MED. FAM. INCOME	
MAINE	1970 MED. FAM. INCOME	
MARYLAND	1969 MED. FAM. INCOME	
MASSACHUSETTS	1970 MED. FAM. INCOME	
MICHIGAN	1969 MED. FAM. INCOME	
MINNESOTA	1970 MED. FAM. INCOME	
MISSISSIPPI	1969 MED. FAM. INCOME	
MISSOURI	1970 MED. FAM. INCOME	
MONTANA	1969 MED. FAM. INCOME	
NEBRASKA	1970 MED. FAM. INCOME	
NEVADA	1969 MED. FAM. INCOME	
NEW HAMPSHIRE	1970 MED. FAM. INCOME	
NEW JERSEY	1969 MED. FAM. INCOME	
NEW YORK	1970 MED. FAM. INCOME	
NORTH CAROLINA	1969 MED. FAM. INCOME	
NORTH DAKOTA	1970 MED. FAM. INCOME	
OHIO	1969 MED. FAM. INCOME	
OKLAHOMA	1970 MED. FAM. INCOME	
OREGON	1969 MED. FAM. INCOME	
PENNSYLVANIA	1970 MED. FAM. INCOME	
RHODE ISLAND	1969 MED. FAM. INCOME	
SOUTH CAROLINA	1970 MED. FAM. INCOME	
SOUTH DAKOTA	1969 MED. FAM. INCOME	
TENNESSEE	1970 MED. FAM. INCOME	
TEXAS	1969 MED. FAM. INCOME	
UTAH	1970 MED. FAM. INCOME	
VERMONT	1969 MED. FAM. INCOME	
VIRGINIA	1970 MED. FAM. INCOME	
WASHINGTON	1969 MED. FAM. INCOME	
WEST VIRGINIA	1970 MED. FAM. INCOME	
WISCONSIN	1969 MED. FAM. INCOME	
WYOMING	1970 MED. FAM. INCOME	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
1T	427	367	3	0
1-4	1852	1732	6	11
5-9	2157	2044	9	5
10-14	1631	1581	10	13
15-19	1506	1513	5	12
20-24	1584	1610	6	36
25-29	1664	1785	19	38
30-34	1592	1685	14	28
35-39	1922	2483	16	39
40-44	2094	2660	21	29
45-49	2152	2552	18	37
50-54	2229	2717	14	23
55-59	2080	2321	17	24
60-64	1721	1979	8	9
65-69	1191	1566	4	9
70-74	752	1082	3	2
75-79*	639	1070	0	2
80-84*		0	0	0
85-up	93	226	1	0
TOTALS	27276	31373	175	317
GRAND TOTAL				5941

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	1184.0	2108.0	2229.0
EXPECTED*	1312.1	2370.8	2554.6
OBS/EXP	0.902	0.889	0.873
CV-RENAL			
OBSERVED	710.0	1260.0	1321.0
EXPECTED*	754.3	1409.9	1570.0
OBS/EXP	0.941	0.894	0.841
HEART			
OBSERVED	516.0	930.0	982.0
EXPECTED*	542.8	1003.4	1091.6
OBS/EXP	0.951	0.927	0.900
NON CV-R			
OBSERVED	474.0	848.0	908.0
EXPECTED*	557.8	960.9	984.6
OBS/EXP	0.850	0.883	0.922
CANCER			
OBSERVED	220.0	379.0	415.0
EXPECTED*	226.7	396.0	389.7
OBS/EXP	0.971	0.957	1.065

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR										
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	594	500	1184	660	764	684	2108	739	769	721	2229
CV-RENAL	352	358	710	401	447	412	1260	430	467	424	1321
HEART	253	263	516	293	331	306	930	311	346	325	982
NON CV-R	242	232	474	259	317	272	848	309	302	297	908
CANCER	105	115	220	101	154	124	379	148	139	128	415

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	NP	NM	NF
IT 1	3695	3511	555	471
1-4	12984	12277	1849	1837
5-9	10912	10700	1666	1775
10-14	8778	8543	1550	1734
15-19	9760	10471	1427	1595
20-24	16094	16369	1927	2073
25-29	16559	16058	2299	2225
30-34	13137	13269	2148	2805
35-39	11661	12159	1957	1996
40-44	10768	11354	1646	1646
45-49	9821	10314	1640	1617
50-54	9037	9544	1502	1285
55-59	7971	8773	1113	1017
60-64	6825	7450	809	743
65-69	5398	6492	708	714
70-74	3673	4658	360	379
75-79 #	3365	4940	286	334
80-84 #	0	0	0	0
85-9p	481	959	47	79
TOTALS	160919	167851	23606	23525
GRAND TOTAL				375901

1960	MF	MM	NP
EM	1571	4979	1210
	1819	18034	4503
	18387	17584	4463
	15330	14841	3362
	13199	15135	2592
	16434	18072	2384
	15265	14126	2937
	14263	13666	3132
	12889	13311	3037
	11171	11825	2768
	10661	11106	2381
	9323	10477	2184
	8255	9260	1769
	6881	8281	1636
	5550	7494	1301
	4259	5935	1040
	2681	4173	714
	1372	2397	482
	757	1457	211
	190828	202193	133
			39855
			47116
			38450

1970	NP	NM	NP	NM
225	4031	1160	1108	
335	14625	4249	4255	
365	18929	6024	5374	
391	18473	6293	6170	
330	23593	5074	5002	
330	218857	3510	4757	
327	15043	3243	3778	
323	12614	2828	3362	
332	10757	2805	3155	
335	11833	2830	3266	
335	12342	2503	2802	
369	11200	2158	2365	
362	10620	2158	2118	
332	10048	1825	2118	
324	9337	1402	1696	
324	9337	1182	1431	
404	7750	867	1025	
457	6470	867	1025	
571	5007	510	666	
571	3052	249	363	
487	3052	249	363	
963	2078	208	289	
406	226849	48940	53482	
			53687	

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1948-50	1959-61	1969-71
TOTAL			
OBSERVED	7760.0	13825.0	15120.0
EXPECTED*	7104.3	13284.5	14884.7
OBS/EXP	1.092	1.041	1.016
CV-RENAL			
OBSERVED	4013.0	7427.0	7894.0
EXPECTED*	3843.5	7094.9	8194.7
OBS/EXP	1.044	1.047	0.963
HEART			
OBSERVED	2621.0	5081.0	5529.0
EXPECTED*	2713.8	4950.0	5647.9
OBS/EXP	0.966	1.026	0.979
NON CV-R			
OBSERVED	3747.0	6398.0	7226.0
EXPECTED*	3260.9	6189.7	6690.1
OBS/EXP	1.149	1.034	1.080
CANCER			
OBSERVED	1160.0	2233.0	2668.0
EXPECTED*	1119.0	1992.7	2201.2
OBS/EXP	1.037	1.121	1.212

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS					CODE	
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971		69-71 SUM
CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	1950 RANK BY POPULATION
												28
												1950 POP/50. MILE
												9541
TOTAL	3880	3890	7760	4684	4623	4518	13825	4902	5121	5097	15120	1970 POP/50. MILE
CO-CENTRAL	1866	2037	4013	2520	2088	2419	7067	2552	2609	2683	7834	1949 MED. FAM. INCOME
HEART	1988	1333	3321	1749	1669	1670	5081	1832	1863	1893	5894	1969 MED. FAM. INCOME
NON-CV-R	1894	1853	3747	2161	2135	2099	6398	2310	2312	2484	7226	URBAN CLASS
CANCER	569	591	1160	759	745	729	2253	840	939	889	2668	1950 URBAN AREA RANK
												JAN MEAN TEMPERATURE
												29
												JULY MEAN TEMPERATURE
												74
												MEAN ANN. PRECIPITATION
												37
												LAND RESOURCE REGION
												M
												WATER SOURCE
												SURFACE
												90 PPM
												NON-CARBONATE HARDNESS
												62 PPM
												FLUORIDATION STATUS
												NO ARTIFICIAL-ION NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NF	WM	WP	NM	NF	WM	WP	NM	NF
LT 1	386	340	0	1	597	618	1	1	418	451	1	1
1-4	1621	1488	1	0	2702	2618	0	0	1702	1736	3	4
5-9	1311	1308	1	1	3016	2913	4	1	2392	2460	2	4
10-14	927	907	1	2	2407	2386	1	1	2639	2639	3	2
15-19	712	737	0	1	1254	1302	1	2	2381	2259	13	6
20-24	1099	1099	2	5	1852	1773	3	5	1721	1732	7	8
25-29	1283	1386	1	4	2063	2142	4	1	1365	1415	5	9
30-34	1184	1184	1	0	2104	2135	1	1	1312	1417	5	9
35-39	1094	1145	0	1	1627	1522	0	1	1536	1707	3	6
40-44	957	900	0	3	1231	1275	1	0	1606	1778	2	4
45-49	857	891	2	0	1101	1170	0	0	1342	1381	6	2
50-54	677	669	1	2	955	987	0	0	1021	1135	2	1
55-59	482	522	0	0	769	863	0	0	857	1052	0	4
60-64	335	393	0	0	568	656	0	0	676	857	3	2
65-69	197	253	0	0	321	496	0	0	466	711	1	0
70-74	170	275	0	2	176	308	0	0	294	468	1	4
75-79*	0	0	0	0	98	174	0	0	127	285	0	1
80-84*	30	47	0	1	44	100	0	0	67	184	0	0
85-UP												
TOTALS	14241	14921	12	21	23294	24598	17	13	23839	25716	58	65
GRAND TOTAL				29195				47922				49678

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	413.0	415.8	0.993		945.0	992.1	0.952		1095.0	1246.6	0.878	
CV-RENAL	222.0	211.3	1.051		501.0	506.8	0.989		584.0	691.6	0.844	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
HEART	137.0	153.8	0.891		331.0	367.1	0.902		419.0	494.6	0.847	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
NON CV-R	191.0	204.5	0.934		444.0	485.3	0.915		511.0	555.0	0.921	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
CANCER	71.0	68.8	1.032		180.0	161.9	1.112		217.0	204.1	1.063	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CHARACTERISTICS		CODE
STATE		
OHIO		419
1950 RANK BY POPULATION		3435
1950 POP/SQ. MILE		5710
1970 POP/SQ. MILE		4229
1949 MED. FAM. INCOME		11778
1969 MED. FAM. INCOME		36
URBAN CLASS		27
1950 URBAN AREA RANK		37
JAN MEAN TEMPERATURE		72
JULY MEAN TEMPERATURE		72
MEAN ANN. PRECIPITATION		37
LAND RESOURCE REGION		R
WATER SOURCE		GROUND
TOTAL HARDNESS		97 PPM
NON-CARBONATE HARDNESS		0 PPM
FLUORIDATION STATUS		NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	2339	2266	453	467	2183	2047	869	897	1488	1353	831	782
1-4	8482	8304	1499	1552	8409	8111	3435	3431	4938	4916	3095	3062
5-9	7318	7272	1320	1342	9317	9062	3607	3665	6413	6025	4256	4256
10-14	5870	5516	1103	1234	8610	8511	2624	2813	6817	6548	4382	4488
15-19	5401	6395	995	1031	6870	7649	1656	1925	7961	8612	3779	3868
20-24	8328	9451	1362	1784	6522	7715	1476	2056	8897	9885	2765	3590
25-29	9694	10578	1797	2024	6181	6051	1827	2224	5857	5243	2228	2610
30-34	8719	8937	1675	1716	6390	6594	2024	2530	3943	3959	1904	2445
35-39	7694	8186	1558	1589	6790	7301	2207	2777	3600	3863	1920	2334
40-44	7241	7652	1218	1153	6412	7060	1904	1935	4286	4665	2042	2538
45-49	6306	6631	971	1013	6074	6658	1568	1620	4846	5454	2108	2318
50-54	5873	6352	911	839	5568	6154	1221	1191	4631	5216	1859	1901
55-59	5279	5647	667	598	4904	5470	1030	1038	4338	5041	1497	1600
60-64	4364	4881	462	431	4659	5039	829	744	3692	4530	1084	1143
65-69	3305	4010	359	359	3860	4608	628	619	2841	3944	813	883
70-74	2263	2888	186	187	2846	3725	445	405	2313	3557	555	693
75-79*	2091	2844	156	144	1659	2437	202	243	1744	2776	344	447
80-84*	0	0	0	0	837	1326	82	93	906	2773	178	287
85-UP	293	529	18	40	447	729	65	72	527	1069	141	186
TOTALS	100860	108739	16710	17563	98538	106247	27669	29878	80038	88369	35781	39413
GRAND TOTAL				243872				262332				243601

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL												
		2811.0	4822.0	4619.0								
		2334.4	4278.9	4692.8								
		1.204	1.127	0.984								
HEART												
		2021.0	3011.0	3386.0								
		1655.8	3000.7	3214.3								
		1.221	1.003	1.053								
NON CV-R												
		2697.0	3763.0	4189.0								
		2068.8	3642.1	3510.7								
		1.304	1.033	1.160								
CANCER												
		789.0	1338.0	1507.0								
		697.3	1220.0	1221.0								
		1.132	1.097	1.234								

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE		OHIO	
1950 RANK BY POPULATION	44	1950 RANK BY POPULATION	44
1950 POP./SQ. MILE	9755	1950 POP./SQ. MILE	9755
1970 POP./SQ. MILE	6360	1970 POP./SQ. MILE	6360
1949 MED. FAM. INCOME	3744	1949 MED. FAM. INCOME	3744
1969 MED. FAM. INCOME	9600	1969 MED. FAM. INCOME	9600
URBAN CLASS	CENTRAL	URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	39	1950 URBAN AREA RANK	39
JAN MEAN TEMPERATURE	29	JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	75	JULY MEAN TEMPERATURE	75
MEAN ANN. PRECIPITATION	35	MEAN ANN. PRECIPITATION	35
LAND RESOURCE REGION	M	LAND RESOURCE REGION	M
WATER SOURCE	GROUND	WATER SOURCE	GROUND
TOTAL HARDNESS	358 PPM	TOTAL HARDNESS	358 PPM
NON-CARBONATE HARDNESS	74 PPM	NON-CARBONATE HARDNESS	74 PPM
FLUORIDATION STATUS	NO ARTIFICIAL	FLUORIDATION STATUS	NO ARTIFICIAL
	LOW NATURAL		LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	383	374	1	1	334	318	12	22	117	91	292	302
1-4	1336	1265	4	2	1169	1131	47	52	280	283	1066	1041
5-9	1217	1169	2	1	1204	1234	62	47	270	301	1326	1413
10-14	835	869	1	2	1184	1222	27	30	333	302	1357	1483
15-19	851	963	2	2	970	1216	11	25	413	459	972	1100
20-24	1273	1654	4	5	1048	1399	28	51	839	951	949	1140
25-29	1695	1901	7	8	1169	1114	50	63	642	578	1114	1344
30-34	1543	1705	6	6	1118	1126	45	51	332	324	922	973
35-39	1325	1679	6	10	1047	1222	50	49	270	282	759	895
40-44	1337	1640	5	6	997	1331	26	30	356	347	670	798
45-49	1253	1566	5	5	1090	1416	21	10	402	489	583	593
50-54	1332	1556	8	6	1059	1477	10	20	447	593	409	421
55-59	1207	1448	2	3	1052	1407	14	13	504	731	263	276
60-64	1041	1279	2	2	1071	1385	11	5	497	791	155	179
65-69	787	1005	2	2	892	1179	2	6	408	692	98	168
70-74	440	730	0	1	610	1021	2	8	376	662	59	104
75-79#	410	680	0	2	417	642	1	3	251	527	35	47
80-84#	0	0	0	0	180	371	0	0	148	337	16	34
85-UP	57	120	0	1	86	178	0	1	78	219	18	24
TOTALS	18322	21603	57	65	16697	20389	419	486	6963	8959	11063	12615
GRAND TOTAL			40047				37991					39600

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	804.0	1391.0	0.578		804.0	1391.0	0.578		804.0	1391.0	0.578	
CV-RENAL	452.0	790.0	0.572		452.0	790.0	0.572		452.0	790.0	0.572	
HEART	325.0	563.0	0.576		325.0	563.0	0.576		325.0	563.0	0.576	
NON CV-R	352.0	601.0	0.586		352.0	601.0	0.586		352.0	601.0	0.586	
CANCER	154.0	256.0	0.598		154.0	256.0	0.598		154.0	256.0	0.598	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949				1959				1969				1971				69-71			
	1949	1950	49-50	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM	1971	SUM	69-71	SUM	69-71	SUM	69-71	SUM
TOTAL	382	422	804		469	445	477	1391	440	373	338	1151	338	1151						
CV-RENAL	209	243	452		258	265	267	790	223	184	186	593	186	593						
HEART	143	182	325		191	181	191	563	172	140	146	458	146	458						
NON CV-R	173	179	352		211	180	210	601	217	189	152	558	152	558						
CANCER	73	81	154		87	72	97	256	74	67	47	188	47	188						

FLUORIDATED IN 1956

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	489	460	1	2	664	701	2	1	634	603	8	10
1-4	2268	2137	3	3	2716	2629	5	6	2074	1925	35	24
5-9	2314	2177	3	2	3393	3250	8	8	2773	2595	18	23
10-14	1501	1328	2	3	3106	3112	4	6	2974	3016	20	15
15-19	983	957	0	2	2152	2231	2	4	2870	2921	16	14
20-24	976	1177	5	10	1357	1741	2	3	2853	3765	31	52
25-29	1731	2095	7	7	1595	1733	7	10	3011	2781	44	60
30-34	1992	2242	0	3	2024	2180	8	9	1735	1731	46	34
35-39	2023	1983	3	3	2402	2771	5	7	1455	1607	17	20
40-44	1597	1605	2	2	2583	2764	6	2	1903	1611	10	13
45-49	1275	1207	1	3	2328	2466	2	7	2314	2733	16	19
50-54	1117	1046	4	6	1876	1874	1	4	2451	2990	6	4
55-59	906	804	1	2	1457	1458	0	1	2218	2539	6	9
60-64	623	555	0	1	1096	1178	2	4	1725	2001	3	7
65-69	376	396	0	1	830	928	2	0	1063	1370	4	4
70-74	227	265	1	0	513	632	0	0	689	1097	9	3
75-79*	164	245	1	0	255	375	0	1	514	724	1	1
80-84*	0	0	0	0	106	197	0	0	247	488	2	0
85-UP	28	47	0	0	77	112	0	0	142	289	3	2
TOTALS	20590	20726	32	48	30540	32332	56	70	33645	37296	297	314
GRAND TOTAL				41396				62998				71552

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				1959-61				1970				1971				69-71			
	1949	1950	49-50	SUM	1949	1950	49-50	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM	1971	1971	1971	1971	SUM	SUM	SUM	SUM
TOTAL	221	249	470	1139	393	431	824	1264	393	431	440	1264	618	632	680	1930	680	680	680	680	1930	1930	1930	1930
CV-RENAL	120	137	257	514	182	212	394	626	182	212	232	626	339	363	370	1072	370	370	370	370	1072	1072	1072	1072
HEART	90	108	198	396	128	166	294	456	128	166	162	456	246	273	287	806	287	287	287	287	806	806	806	806
NON CV-R	101	112	213	426	211	219	430	638	211	219	208	638	279	269	310	858	310	310	310	310	858	858	858	858
CANCER	34	30	64	128	93	96	189	282	93	96	93	282	126	138	159	423	159	159	159	159	423	423	423	423

CITY CHARACTERISTICS

STATE	OHIO
1950 RANK BY POPULATION	289
1950 POP/50. MILE	4224
1970 POP/50. MILE	6880
1949 MED. FAM. INCOME	4537
1969 MED. FAM. INCOME	11830
URBAN CLASS	PEINCE
1950 URBAN AREA RANK	10
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	32
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	128 PPM
NON-CARBONATE HARDNESS	43 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1956

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	470.0	487.5	0.964		1264.0	1367.5	0.924		1930.0	2109.8	0.915	
CV-RENAL	257.0	233.9	1.099		626.0	705.8	0.887		1072.0	1191.1	0.900	
HEART	198.0	172.4	1.148		456.0	516.5	0.883		806.0	852.8	0.945	
NON CV-R	213.0	253.5	0.840		638.0	661.6	0.964		858.0	978.7	0.876	
CANCER	64.0	81.8	0.782		282.0	233.7	1.207		423.0	351.1	1.205	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950										1960										1970									
	1950					1960					1960					1960					1970					1970				
	WM	WF	NM	NP		WM	WF	NM	NP		WM	WF	NM	NP		WM	WF	NM	NP		WM	WF	NM	NP		WM	WF	NM	NP	
TOTAL	668	623	1291	1529		32779	35180	2074	2321		29963	33012	2315	2575		29963	33012	2315	2575		29963	33012	2315	2575		29963	33012	2315	2575	
CV-RENAL	345	333	678	579		1476	1641	77	70		1371	1699	85	94		1371	1699	85	94		1371	1699	85	94		1371	1699	85	94	
HEART	241	242	483	483		928	1163	36	62		945	1389	61	71		945	1389	61	71		945	1389	61	71		945	1389	61	71	
NON CV-R	323	290	613	467		659	982	23	19		782	1132	34	40		782	1132	34	40		782	1132	34	40		782	1132	34	40	
CANCER	74	90	164	159		457	623	18	27		456	605	17	31		456	605	17	31		456	605	17	31		456	605	17	31	
GRAND TOTAL	26625	28419	1378	1529		32779	35180	2074	2321		29963	33012	2315	2575		29963	33012	2315	2575		29963	33012	2315	2575		29963	33012	2315	2575	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1291.0	2048.0	1.261		1291.0	2048.0	1.261		1291.0	2048.0	1.261	
CV-RENAL	678.0	1153.0	1.556		678.0	1153.0	1.556		678.0	1153.0	1.556	
HEART	483.0	889.0	1.862		483.0	889.0	1.862		483.0	889.0	1.862	
NON CV-R	613.0	895.0	1.457		613.0	895.0	1.457		613.0	895.0	1.457	
CANCER	164.0	330.0	2.004		164.0	330.0	2.004		164.0	330.0	2.004	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949					1950					49-50					59-61					1969					1970					1971					69-71				
	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER	TOTAL	CV-RENAL	HEART	NON CV-R	CANCER										
	668	623	1291	1291	682	697	669	1368	1368	682	2048	722	731	1453	1453	2048	722	731	1453	1453	2048	722	731	1453	1453	2048	722	731	1453	1453	2136									
	345	333	678	678	375	385	375	760	760	375	1153	391	395	786	786	1153	391	395	786	786	1153	391	395	786	786	1153	391	395	786	786	1161									
	241	242	483	483	294	293	296	587	587	294	883	288	301	589	589	883	288	301	589	589	883	288	301	589	589	883	288	301	589	589	889									
	323	290	613	613	297	312	286	599	599	297	895	331	336	667	667	895	331	336	667	667	895	331	336	667	667	895	331	336	667	667	931									
	74	90	164	164	113	114	103	227	227	113	330	128	131	259	259	330	128	131	259	259	330	128	131	259	259	330	128	131	259	259	371									

CITY CHARACTERISTICS

STATE	OHIO
1950 RANK BY POPULATION	202
1950 POP./SQ. MILE	7625
1970 POP./SQ. MILE	4242
1949 MED. FAM. INCOME	3430
1969 MED. FAM. INCOME	9534
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	155
JAN MEAN TEMPERATURE	31
JULY MEAN TEMPERATURE	76
MEAN ANN. PRECIPITATION	40
LAND RESOURCE REGION	M
WATER SOURCE	GROUND
TOTAL HARDNESS	89 PPM
NON-CARBONATE HARDNESS	69 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1953

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
1-4	577	582	1	0	591	624	2	2	620	595	5	6
5-9	2201	2182	2	0	2277	2320	9	0	2222	2139	19	23
10-14	2134	2106	3	1	2574	2577	9	5	2802	2670	18	18
15-19	1650	1678	16	5	2459	2510	5	4	2894	2904	12	15
20-24	1553	1663	1	2	1764	1958	2	2	2593	2773	18	17
25-29	1814	2263	4	7	1484	2164	11	10	2590	3441	16	17
30-34	2465	2706	7	4	1846	1787	11	3	2501	2485	28	32
35-39	2289	2669	1	3	1830	1993	10	9	1738	1836	21	11
40-44	2313	2714	3	6	1890	2164	3	7	1599	1666	14	17
45-49	2258	2723	3	6	1838	2307	3	6	1888	1972	11	13
50-54	2243	2914	2	5	1936	2409	3	6	1836	2118	7	14
55-59	2371	2857	8	3	1891	2441	0	4	1735	2254	10	11
60-64	2309	2753	2	3	1804	2532	2	4	1660	2269	8	4
65-69	1941	2311	4	3	1716	2342	2	2	1477	2215	2	10
70-74	1373	1746	2	1	1510	2211	0	1	1183	2119	6	13
75-79	919	1280	1	0	1137	1784	0	0	970	1837	7	5
80-84	740	1229	0	0	671	1037	0	1	728	1443	0	3
85-UP	118	223	0	0	341	618	1	0	396	505	0	1
TOTALS	31368	36595	61	47	29881	36130	66	77	31672	38081	193	227
GRAND TOTAL				68071				66154				70173

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1469.0	1496.8	0.981		2354.0	2346.4	0.994		2451.0	2758.5	0.885	
CV-RENAL	854.0	853.4	1.001		1377.0	1500.9	0.917		1367.0	1672.7	0.817	
HEART	593.0	614.4	0.965		982.0	1065.0	0.922		982.0	1165.3	0.843	
NON CV-R	615.0	643.4	0.956		977.0	1045.5	0.934		1084.0	1085.8	0.998	
CANCER	276.0	256.9	1.075		423.0	417.2	1.014		473.0	425.0	1.113	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	OHIO
1950 RANK BY POPULATION	171
1950 POP/SQ. MILE	12156
1970 POP/SQ. MILE	12759
1949 MED. FAM. INCOME	4705
1969 MED. FAM. INCOME	11579
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	10
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	32
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	128 PPM
NON-CARBONATE HARDNESS	43 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1956

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	576	464	48	51	561	536	97	90	423	444	94	120
1-4	2042	1958	206	159	2147	1993	381	350	1817	1604	453	424
5-9	1837	1894	144	185	2283	2230	364	371	2204	2255	605	589
10-14	1502	1511	114	118	2106	1936	293	285	2221	2058	555	576
15-19	1278	1482	97	112	1402	1695	168	240	1944	2035	432	483
20-24	1644	1999	131	155	1163	1555	131	170	1584	2077	258	325
25-29	1858	2066	158	177	1312	1332	151	195	1483	1484	205	279
30-34	1863	1912	138	126	1436	1471	174	201	1147	1121	185	201
35-39	1714	1670	136	137	1374	1550	201	201	1000	1040	174	229
40-44	1499	1602	118	103	1360	1495	145	146	1227	1268	197	247
45-49	1423	1441	112	84	1292	1361	136	136	1184	1365	125	151
50-54	1268	1396	69	55	1156	1301	103	82	1104	1305	125	151
55-59	1126	1202	62	37	917	1152	103	49	1079	1167	126	131
60-64	1225	1927	21	28	917	1154	59	49	877	1211	88	105
65-69	759	1927	21	28	763	1113	47	51	721	1617	98	78
70-74	559	772	19	30	652	912	30	32	550	954	32	45
75-79	589	712	19	31	839	591	20	28	399	785	32	34
80-84	0	0	0	0	195	374	12	11	265	509	15	21
85-UP	67	132	4	6	132	205	6	7	155	329	7	12
TOTALS	22656	24308	1640	1642	21746	23926	2619	2746	21481	24105	3888	4260
GRAND TOTAL				50246				51037				53734

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1121.0	1831.0	2006.0		971.0	1646.2	1841.0		971.0	1646.2	1841.0	
	1.154	1.112	1.090									
CV-RENAL	570.0	998.0	1057.0		534.5	926.5	1073.5		570.0	998.0	1057.0	
	1.066	1.077	0.985									
HEART	382.0	628.0	799.0		380.3	650.6	741.5		382.0	628.0	799.0	
	1.005	0.965	1.078									
NON CV-R	551.0	833.0	949.0		436.5	719.6	767.5		551.0	833.0	949.0	
	1.262	1.158	1.236									
CANCER	161.0	327.0	370.0		154.6	251.7	270.8		161.0	327.0	370.0	
	1.042	1.299	1.366									

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1960				1961				1969				1970				1971				1972			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	554	567	1121	570	580	501	650	1831	580	501	650	1831	580	501	650	1831	580	501	650	1831	580	501	650	1831	580	501	650	1831	580	501	650	1831
CV-RENAL	276	294	570	382	187	215	226	628	187	215	226	628	187	215	226	628	187	215	226	628	187	215	226	628	187	215	226	628	187	215	226	628
HEART	187	195	382	273	187	215	226	628	187	215	226	628	187	215	226	628	187	215	226	628	187	215	226	628	187	215	226	628	187	215	226	628
NON CV-R	278	273	551	551	269	255	309	833	269	255	309	833	269	255	309	833	269	255	309	833	269	255	309	833	269	255	309	833	269	255	309	833
CANCER	75	86	161	161	101	113	113	327	101	113	113	327	101	113	113	327	101	113	113	327	101	113	113	327	101	113	113	327	101	113	113	327

CITY CHARACTERISTICS

STATE	CODE
1950 RANK BY POPULATION	OHIO
1950 POP/SQ. MILE	231
1970 POP/SQ. MILE	6525
1949 MED. FAM. INCOME	4593
1969 MED. FAM. INCOME	3387
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	27
1950 URBAN POPULATION	73
MEAN ANNUAL PRECIPITATION	36
LAND RESOURCES REGION	M
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	80 PPM
NON-CARBONATE HARDNESS	48 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	585	507	32	32	826	808	73	89	696	698	91	99
1-4	2196	1981	134	110	3280	3174	330	313	2868	2652	409	392
5-9	1858	1791	117	108	3607	3493	295	314	3714	3647	554	635
10-14	1593	1465	81	74	3101	2978	218	204	3715	3684	537	568
15-19	1340	1468	74	70	1935	2039	118	148	3159	3234	413	354
20-24	1938	1943	114	145	1686	1984	110	159	3247	3053	284	263
25-29	2424	2237	174	134	2003	2056	149	162	2241	2252	221	227
30-34	2234	2072	139	98	2468	2394	161	192	1960	1702	176	223
35-39	1994	1664	135	86	2582	2358	133	122	2181	1702	242	230
40-44	1476	1325	107	68	2742	2496	138	109	2220	2238	206	208
45-49	1364	1195	82	68	1695	1595	86	80	2057	2026	163	135
50-54	1385	1158	53	38	1361	1292	94	65	1733	1763	128	107
55-59	1218	986	20	23	1184	1082	45	38	1318	1445	96	101
60-64	828	794	25	15	1010	1032	40	36	888	1057	75	81
65-69	573	510	12	18	778	768	20	23	632	887	36	37
70-74	407	390	6	9	438	477	13	11	462	720	22	27
75-79	0	0	0	0	205	240	1	8	265	393	13	8
80-84	0	0	0	0	71	125	5	5	149	267	9	15
85-UP	52	64	5	3								
TOTALS	25258	23411	1391	1142	32492	31957	2243	2240	34399	35812	3833	4141
GRAND TOTAL				51202				68932				78185

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	SUM		1959	1960	1961	SUM
TOTAL	513	482	995		516	596	602	1714
CV-RENAL	219	228	447		255	317	311	883
HEART	139	160	299		198	234	245	677
NON CV-R	294	254	548		261	279	291	831
CANCER	80	72	152		96	95	110	301

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	PERCENT DEFORESTATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
OHIO	226	4655	3506	3681	10072	INDEPENDENT	26	72	34	1	SURFACE	132 PPM	40 PPM	FLUORIDATED	

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	995.0	831.3	1.197		1714.0	1690.2	1.020		2059.0	2058.7	1.000	
CV-RENAL	447.0	431.9	1.035		883.0	875.2	1.009		1003.0	1128.8	0.889	
HEART	299.0	315.6	0.947		677.0	631.3	1.072		761.0	797.3	0.955	
NON CV-R	548.0	399.5	1.372		831.0	805.0	1.032		1056.0	929.8	1.136	
CANCER	152.0	138.0	1.102		301.0	268.3	1.122		370.0	319.6	1.158	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	418	396	22	29	442	433	76	75	446	369	92	84
1-4	1601	1562	82	111	1762	1611	300	270	1494	1519	324	352
5-9	1421	1465	87	112	1940	1875	272	310	2017	1918	490	457
10-14	1286	1303	82	101	1816	1860	205	196	2117	1933	541	505
15-19	1152	1298	65	71	1270	1538	141	159	2049	1990	617	410
20-24	1447	1656	92	103	1146	1459	140	172	2110	2060	776	307
25-29	1750	1813	130	119	1290	1299	153	189	1682	1513	408	252
30-34	1653	1679	122	103	1309	1348	162	166	1178	1158	222	235
35-39	1526	1623	89	79	1414	1526	162	149	1094	1159	209	223
40-44	1498	1550	76	65	1397	1493	147	140	1246	1353	172	208
45-49	1337	1347	79	72	1346	1477	117	98	1308	1483	191	196
50-54	1336	1252	67	46	1271	1387	83	75	1288	1489	162	160
55-59	1062	1093	41	34	1091	1242	76	88	1214	1371	134	119
60-64	928	993	31	16	999	1097	49	50	1072	1289	94	95
65-69	737	840	14	10	769	964	39	42	824	1101	78	99
70-74	485	598	6	6	594	805	29	12	682	911	55	62
75-79#	439	661	13	8	380	539	3	13	372	711	27	31
80-84#	0	0	0	0	182	286	3	6	215	465	8	13
85-UP	64	131	1	1	96	188	4	3	131	282	12	14
TOTALS	20140	21260	1099	1065	20514	22437	2161	2213	22539	24074	4612	3822
GRAND TOTAL				43564				47325				55047

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL												
HEART												
NON CV-R												
CANCER												

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1971			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	500	479	979	979	554	605	565	1724	693	637	696	2026	1971	1970	1971	69-71 SUM
CV-RENAL	255	241	496	496	289	356	333	978	392	338	379	1109	379	338	379	1109
HEART	155	151	306	306	175	223	207	605	253	217	247	717	247	217	247	717
NON CV-R	245	238	483	483	265	249	232	746	301	299	317	917	317	299	317	917
CANCER	59	75	134	134	88	81	69	238	115	114	117	346	117	114	117	346

CITY CHARACTERISTICS

CODE

STATE	OHIO
1950 RANK BY POPULATION	270
1950 POP/SQ. MILE	6702
1970 POP/SQ. MILE	2284
1949 MED. FAM. INCOME	3728
1969 MED. FAM. INCOME	9559
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	26
JULY MEAN TEMPERATURE	71
MEAN ANN. PRECIPITATION	39
LAND RESOURCE REGION	R
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	229 PPM
NON-CARBONATE HARDNESS	34 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	333	347	10	6	431	410	20	7	364	366	14	12
1-4	1437	1465	29	37	1763	1641	65	52	1520	1494	55	53
5-9	1432	1308	31	37	1926	1838	56	65	1955	1868	88	84
10-14	1212	1223	27	26	1679	1668	43	58	1883	1748	98	75
15-19	1015	1101	21	20	1189	1285	38	40	1622	1623	57	72
20-24	1064	1322	28	24	1006	1182	16	24	1383	1767	32	44
25-29	1377	1412	25	24	1131	1142	24	26	1394	1365	31	35
30-34	1144	1220	37	34	1206	1224	38	37	1093	1080	31	39
35-39	1048	1191	21	21	1240	1256	27	30	929	924	26	30
40-44	1110	1096	22	17	1009	1112	27	37	1065	1088	22	40
45-49	891	952	25	16	936	1025	23	16	989	1103	36	28
50-54	898	945	24	17	925	949	22	22	894	955	22	40
55-59	823	891	8	7	731	813	22	13	714	849	33	13
60-64	727	821	15	11	662	771	15	12	694	825	20	21
65-69	624	684	10	9	589	790	6	12	480	677	18	16
70-74	397	542	4	3	498	683	8	11	401	612	10	5
75-79#	397	556	2	2	315	470	5	2	293	541	3	5
80-84#	0	0	0	0	147	272	2	3	185	365	3	6
85-UP	63	102	0	0	83	156	0	2	96	222	1	2
TOTALS	15992	17172	339	314	17466	18687	457	469	17954	19472	600	620
GRAND TOTAL				33817				37079				38646

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	731.0	671.2	1.089		1189.0	1142.0	1.041		1251.0	1203.1	1.040	
CV-RENAL												
OBSERVED	382.0				734.0				730.0			
EXPECTED*	378.7				651.0				703.6			
OBS/EXP	1.009				1.127				1.038			
HEART												
OBSERVED	246.0				469.0				472.0			
EXPECTED*	270.0				459.6				496.1			
OBS/EXP	0.911				1.020				0.963			
NON CV-R												
OBSERVED	349.0				455.0				521.0			
EXPECTED*	292.4				491.0				499.5			
OBS/EXP	1.194				0.927				1.043			
CANCER												
OBSERVED	115.0				144.0				200.0			
EXPECTED*	108.0				177.4				180.4			
OBS/EXP	1.065				0.812				1.108			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	OHIO		CODE
	1950 RANK BY POPULATION	1960 RANK BY POPULATION	
1950 POP/SQ. MILE	6149	5443	
1970 POP/SQ. MILE	5443	3136	
1949 MED. FAM. INCOME	8953	8953	
1969 MED. FAM. INCOME	8953	8953	
URBAN CLASS	INDEPENDENT	INDEPENDENT	
1950 URBAN AREA RANK	27	27	
JAN MEAN TEMPERATURE	73	73	
JULY MEAN TEMPERATURE	30	30	
MEAN ANN. PRECIPITATION	N	N	
LAND RESOURCE REGION	GROUND AND SURFACE	GROUND AND SURFACE	
WATER SOURCE	126 PPM	126 PPM	
TOTAL HARDNESS	89 PPM	89 PPM	
NON-CARBONATE HARDNESS	NO ARTIFICIAL, OPTIMUM NATURAL	NO ARTIFICIAL, OPTIMUM NATURAL	
FLUORIDATION STATUS			

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	59-61				69-71			
	1959	1960	1961	SUM	1971	1970	1971	SUM
TOTAL	383	348	414	1189	421	421	401	1251
CV-RENAL	202	180	241	734	241	248	241	730
HEART	131	115	175	469	151	151	162	472
NON CV-R	181	168	149	465	173	173	160	521
CANCER	61	54	58	144	60	73	67	200

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	275	280	32	24	291	309	29	41	242	254	46	34
1-4	1070	1097	113	102	1128	1216	155	138	943	963	126	112
5-9	1082	1106	108	107	1131	1222	166	133	1388	1306	164	185
10-14	866	876	75	59	1310	1252	166	133	1402	1481	190	210
15-19	823	805	73	84	956	1032	118	110	1271	1312	190	179
20-24	561	1131	98	74	703	896	64	76	874	1210	97	120
25-29	160	1131	76	84	819	798	92	92	921	948	80	109
30-34	1005	1084	78	89	911	920	88	85	736	832	74	76
35-39	977	982	81	88	915	1011	82	91	790	741	58	104
40-44	900	956	66	79	855	970	86	98	814	899	83	82
45-49	897	920	69	65	875	920	91	86	829	943	76	94
50-54	848	797	58	44	772	814	59	68	797	926	79	89
55-59	875	779	58	44	784	834	73	49	737	860	75	75
60-64	653	626	22	27	664	656	33	42	626	757	44	62
65-69	513	533	27	21	602	655	39	34	524	725	50	52
70-74	358	404	9	10	419	519	19	31	399	536	35	32
75-79#	304	393	3	12	274	331	15	8	300	447	15	17
80-84#	0	0	0	0	117	214	2	7	177	247	10	15
85-UP	57	75	1	0	72	86	3	1	80	159	1	6
TOTALS	13495	13992	1074	1033	13718	14783	1376	1359	13850	15546	1492	1651
GRAND TOTAL				29594				31236				32539

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949		1950	49-50		1959	1960	1961	59-61	1969	1970	1971	69-71
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
TOTAL	331	353	684		380	388	413	1181		418	382	387	1187
CV-RENAL	176	205	381		293	296	272	739		239	236	230	705
HEART	114	127	241		152	165	186	503		177	170	161	508
NON CV-R	155	148	303		157	144	141	442		179	146	157	482
CANCER	49	37	86		62	43	55	160		70	62	56	188

CITY CHARACTERISTICS

STATE	OHIO
STATE RANK BY POPULATION	446
1950 POP./SQ. MILE	4417
1970 POP./SQ. MILE	3656
1949 MED. FAM. INCOME	3352
1949 MED. FAM. INCOME	9562
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	71
JAN MEAN TEMPERATURE	27
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	37
LAND RESOURCE REGION	R
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	58 PPM
NON-CARBONATE HARDNESS	17 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	684.0	1181.0	1.182		684.0	1181.0	1.182		684.0	1181.0	1.182	
CV-RENAL	381.0	739.0	1.194		381.0	739.0	1.194		381.0	739.0	1.194	
HEART	241.0	503.0	1.055		241.0	503.0	1.055		241.0	503.0	1.055	
NON CV-R	303.0	442.0	1.168		303.0	442.0	1.168		303.0	442.0	1.168	
CANCER	86.0	160.0	0.919		86.0	160.0	0.919		86.0	160.0	0.919	

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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	WM	WF	WM	WF	WM	WF
LT 1	312	328	39	54	468	421	68	59
1-4	1253	1160	179	180	1739	1566	298	274
5-9	1670	1460	149	166	1800	1738	306	327
10-14	1671	1056	137	148	1644	1586	247	266
15-19	940	1057	135	161	1140	1402	164	163
20-24	1230	1325	157	171	1152	1367	123	151
25-29	1298	1364	150	192	1256	1190	130	185
30-34	1214	1186	128	135	1316	1327	174	179
35-39	1088	1175	127	144	1315	1381	145	145
40-44	992	1060	110	108	1199	1255	108	146
45-49	958	1023	113	100	1151	1214	124	138
50-54	829	874	96	97	1004	1037	96	101
55-59	703	787	68	59	896	1015	85	86
60-64	564	587	45	48	755	816	69	82
65-69	427	523	52	35	531	696	60	55
70-74	280	319	29	26	393	500	39	42
75-79*	256	374	20	20	254	374	22	18
80-84*	0	0	0	0	124	177	10	14
85-UP	43	65	4	8	58	108	6	5
TOTALS	14677	15408	1758	1852	18195	19170	2314	2436
GRAND TOTAL				33695				42115

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	683.0	1118.0	0.992	683.0	1118.0	0.992	1329.0	1438.0	0.924
CV-RENAL	344.0	613.0	0.895	344.0	613.0	0.895	721.0	805.2	0.895
HEART	220.0	414.0	0.969	220.0	414.0	0.969	504.0	564.7	0.893
NON CV-R	339.0	505.0	0.962	339.0	505.0	0.962	608.0	632.8	0.961
CANCER	89.0	181.0	1.014	89.0	181.0	1.014	233.0	223.4	1.043

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1970				1971			
	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF	WM	WF
TOTAL	341	342	583	583	371	381	366	1118	472	443	416	416	472	443	416	416	472	443	416	416
CV-RENAL	173	171	344	344	188	209	216	613	246	248	227	227	246	248	227	227	246	248	227	227
HEART	118	109	220	220	135	142	142	444	177	177	151	151	177	177	151	151	177	177	151	151
NON CV-R	168	168	339	339	183	192	192	505	226	226	195	195	226	226	195	195	226	226	195	195
CANCER	35	34	89	89	58	69	54	181	90	63	80	80	90	63	80	80	90	63	80	80

CITY CHARACTERISTICS

STATE	OHIO
1950 RANK BY POPULATION	361
1950 POP/SQ. MILE	4553
1970 POP/SQ. MILE	2540
1949 MED. FAM. INCOME	3933
1969 MED. FAM. INCOME	10213
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	31
JAN MEAN TEMPERATURE	76
JULY MEAN TEMPERATURE	41
MEAN ANNUAL PRECIPITATION	M
LAND RESOURCE REGION	M
WATER SOURCE	GROUND
TOTAL HARDNESS	302 PPM
NON-CARBONATE HARDNESS	43 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NP	WM	WF	NH	NP
LT 1	372	330	2	7	552	446	8	19
1-4	1354	1335	23	25	1848	1755	60	43
5-9	1298	1305	24	44	1761	2021	56	59
10-14	1068	1092	24	35	1739	1739	32	44
15-19	962	1023	22	32	1297	1418	29	33
20-24	1062	1283	22	32	1076	1225	30	39
25-29	1353	1485	29	30	1249	1254	23	36
30-34	1226	1287	15	34	1339	1372	35	34
35-39	1188	1269	23	25	1324	1347	41	40
40-44	1143	1130	21	24	1250	1322	25	31
45-49	1619	1037	28	29	1169	1285	27	30
50-54	937	999	24	31	1129	1194	18	32
55-59	836	906	23	18	983	1028	29	29
60-64	742	905	11	13	788	919	16	21
65-69	629	764	11	9	667	867	20	22
70-74	504	602	10	10	565	771	5	12
75-79*	480	616	6	8	365	568	6	8
80-84*	0	0	0	0	231	311	4	2
85-UP	72	119	1	0	124	232	1	1
TOTALS	16181	17352	337	405	19716	21074	465	535
GRAND TOTAL			337	34275			465	41790

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL									
	905.0	1451.0	1509.0	905.0	1451.0	1509.0	905.0	1451.0	1509.0
	744.9	1409.8	1490.0	744.9	1409.8	1490.0	744.9	1409.8	1490.0
	1.215	1.029	1.013	1.215	1.029	1.013	1.215	1.029	1.013
CV-RENAL									
	506.0	822.0	842.0	506.0	822.0	842.0	506.0	822.0	842.0
	427.1	816.2	894.0	427.1	816.2	894.0	427.1	816.2	894.0
	1.185	1.007	0.942	1.185	1.007	0.942	1.185	1.007	0.942
HEART									
	319.0	539.0	592.0	319.0	539.0	592.0	319.0	539.0	592.0
	303.3	573.3	621.6	303.3	573.3	621.6	303.3	573.3	621.6
	1.052	0.940	0.952	1.052	0.940	0.952	1.052	0.940	0.952
NON CV-R									
	399.0	629.0	667.0	399.0	629.0	667.0	399.0	629.0	667.0
	317.8	593.6	596.0	317.8	593.6	596.0	317.8	593.6	596.0
	1.256	1.060	1.119	1.256	1.060	1.119	1.256	1.060	1.119
CANCER									
	103.0	204.0	278.0	103.0	204.0	278.0	103.0	204.0	278.0
	119.1	215.4	224.0	119.1	215.4	224.0	119.1	215.4	224.0
	0.865	0.947	1.241	0.865	0.947	1.241	0.865	0.947	1.241

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	OHIO
1950 RANK BY POPULATION	355
1950 POP./SQ. MILE	4896
1970 POP./SQ. MILE	3146
1949 MED. FAM. INCOME	3159
1969 MED. FAM. INCOME	8853
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	39
LAND RESOURCE REGION	N
WATER SOURCE	SURFACE
TOTAL HARDNESS	61 PPM
NON-CARBONATE HARDNESS	29 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1957

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1-1	369	344	0	1	404	377	0	0	241	249	0	0
1-4	1351	1277	0	1	1352	1386	3	4	871	891	5	3
5-9	1084	1132	1	2	1255	1302	3	0	1243	1227	3	3
10-14	915	976	7	1	1249	1223	3	2	1306	1322	1	6
15-19	912	1098	7	1	996	1389	0	3	1270	1500	1	2
20-24	1485	1628	4	2	1450	1622	2	4	1246	1306	6	4
25-29	1581	1636	3	2	1333	1082	4	4	990	967	5	3
30-34	1338	1464	0	2	1117	1083	3	1	826	882	1	5
35-39	1165	1387	2	2	1014	1134	1	3	786	847	3	4
40-44	1244	1376	1	4	957	1165	4	2	846	960	2	5
45-49	1120	1211	0	3	966	1165	2	2	872	977	3	5
50-54	1009	1115	2	0	1000	1109	2	4	783	982	3	2
55-59	888	1049	3	1	880	1003	1	1	749	944	1	4
60-64	699	832	1	1	720	902	2	1	706	862	3	4
65-69	568	745	0	1	557	797	0	0	505	715	2	1
70-74	374	537	0	4	426	636	0	1	354	628	1	1
75-79*	362	529	0	1	297	482	0	0	263	505	1	1
80-84*	0	0	0	0	151	223	0	0	128	283	0	1
85-UP	54	92	0	0	72	143	1	0	91	202	0	0
TOTALS	16518	18428	26	29	16296	18223	29	32	14076	16249	41	54
GRAND TOTAL			35001					34580				30420

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	694.0	656.1	1.058	1057.0	1086.2	0.973	1024.0	1055.2	0.970
CV-RENAL	394.0	363.9	1.083	608.0	617.7	0.984	548.0	628.4	0.872
HEART	277.0	260.9	1.062	447.0	439.2	1.018	425.0	440.7	0.964
NON CV-R	300.0	292.2	1.027	449.0	468.5	0.958	476.0	426.8	1.115
CANCER	110.0	108.5	1.014	199.0	174.7	1.139	192.0	165.3	1.162

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1960				1961				1969				1970				1971				1972			
	1949	1950	1951	SUM	1949	1950	1951	SUM	1949	1950	1951	SUM	1949	1950	1951	SUM	1949	1950	1951	SUM	1949	1950	1951	SUM	1949	1950	1951	SUM	1949	1950	1951	SUM
TOTAL	356	338	694	1388	343	356	358	1057	341	323	360	1024	341	323	360	1024	341	323	360	1024	341	323	360	1024	341	323	360	1024	341	323	360	1024
CV-RENAL	203	191	394	988	211	207	190	608	211	207	190	608	211	207	190	608	211	207	190	608	211	207	190	608	211	207	190	608	211	207	190	608
HEART	143	134	277	654	159	162	126	447	136	132	157	425	136	132	157	425	136	132	157	425	136	132	157	425	136	132	157	425	136	132	157	425
NON CV-R	153	147	300	600	132	149	168	449	158	149	169	476	158	149	169	476	158	149	169	476	158	149	169	476	158	149	169	476	158	149	169	476
CANCER	59	51	110	220	57	65	77	199	50	65	77	192	50	65	77	192	50	65	77	192	50	65	77	192	50	65	77	192	50	65	77	192

CITY CHARACTERISTICS

STATE	OHIO	
	1950 RANK BY POPULATION	1950 RANK BY POPULATION
1950 POP/1000	347	10938
1950 POP/1000	347	10938
1949 MED. FAM. INCOME	3490	9079
1969 MED. FAM. INCOME	3490	9079
URBAN CLASS	FRINGE	FRINGE
1950 URBAN AREA RANK	15	15
JAN MEAN TEMPERATURE	34	34
JULY MEAN TEMPERATURE	78	78
MEAN ANN. PRECIPITATION	39	39
LAND RESOURCE REGION	M	M
WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE
TOTAL HARDNESS	410 PPM	410 PPM
NON-CARBONATE HARDNESS	38 PPM	38 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	333	330	0	0	960	875	0	1	729	734	9	4
1-4	1474	1340	0	0	4133	3931	4	6	3241	3037	11	16
5-9	1439	1260	3	5	5078	5030	11	12	4916	4605	22	19
10-14	1139	916	12	2	4258	4178	12	10	5442	5192	22	13
15-19	797	771	3	1	2333	2454	6	1	4625	4820	9	6
20-24	764	936	0	2	1479	1861	8	0	3113	3757	9	9
25-29	1184	1368	0	1	2047	2467	14	7	2918	3227	9	15
30-34	1329	1472	3	1	3146	3630	13	11	2485	2657	12	17
35-39	1263	1303	0	1	3966	4007	15	9	2493	2716	20	16
40-44	1127	1125	0	1	3540	3491	16	1	3242	3654	13	8
45-49	915	898	1	1	2832	2644	13	3	3802	4130	6	11
50-54	852	844	1	2	2056	1984	5	2	3486	3660	11	10
55-59	718	651	0	0	1464	1515	2	0	2807	2858	6	4
60-64	510	447	0	1	1247	1322	8	2	1900	2123	5	11
65-69	299	307	0	0	1035	1096	15	0	1188	1524	2	5
70-74	191	172	0	0	618	758	3	0	842	1227	2	3
75-79*	133	186	0	0	318	394	0	1	622	906	2	5
80-84*	0	0	0	0	141	171	0	0	232	498	0	1
85-UP	25	38	0	0	66	108	1	0	155	250	0	1
TOTALS	14492	14364	23	18	40717	41916	146	66	48298	51575	169	174
GRAND TOTAL				28897				82845				100216

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	185	173	358		465	498	483	1446	715	748	711	2174
CV-RENAL	95	91	186		261	264	251	776	401	384	399	1184
HEART	66	65	131		174	197	195	566	311	278	309	898
NON CV-R	90	82	172		204	234	232	670	314	364	312	990
CANCER	34	30	64		79	116	97	292	144	165	146	455

CITY CHARACTERISTICS

CODE

STATE	OHIO
1950 RANK BY POPULATION	424
1950 POP/SQ. MILE	1459
1970 POP/SQ. MILE	4818
1949 MED. FAM. INCOME	4099
1969 MED. FAM. INCOME	12438
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	10
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	32
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	128 PPM
NON-CARBONATE HARDNESS	43 PPM
FLUORIDATION STATUS	FLUORIDED IN 1956

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	358.0	1446.0	2174.0	
	370.2	1596.6	2498.1	
	0.967	0.906	0.870	
CV-RENAL				
	186.0	776.0	1184.0	
	182.3	795.9	1377.6	
	1.020	0.975	0.859	
HEART				
	131.0	566.0	898.0	
	134.4	585.1	994.7	
	0.975	0.967	0.903	
NON CV-R				
	172.0	670.0	990.0	
	188.0	800.7	1120.5	
	0.915	0.837	0.884	
CANCER				
	64.0	292.0	455.0	
	62.7	271.2	424.5	
	1.021	1.077	1.072	

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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1-4	353	309	18	11	288	321	17	16	205	182	11	11
5-9	1417	1280	48	61	1288	1255	80	90	752	707	47	51
10-14	1347	1348	62	64	1286	1354	95	72	1055	1007	72	92
15-19	1316	1308	51	58	1086	1359	82	72	1218	1155	82	72
20-24	1027	1059	50	58	923	1147	63	58	1119	1152	64	72
25-29	1219	1307	43	38	685	984	33	36	708	911	32	38
30-34	1103	1303	40	41	759	951	33	47	558	622	14	32
35-39	1688	1294	47	56	897	1162	46	47	544	674	18	27
40-44	1105	1320	29	65	920	1070	41	39	524	650	23	39
45-49	1145	1312	59	50	909	1051	31	59	681	869	37	39
50-54	1001	1171	45	48	850	1087	38	57	763	907	31	45
55-59	957	989	55	35	850	1077	45	42	704	925	34	35
60-64	758	886	31	22	861	1087	49	41	673	865	21	43
65-69	644	729	29	24	772	963	49	32	617	965	24	39
70-74	448	577	21	14	704	834	39	32	634	911	33	31
75-79*	424	595	14	15	526	704	21	24	467	758	30	18
80-84*	0	0	0	0	345	492	14	18	352	519	15	20
85-UP	55	94	3	2	183	286	6	6	186	380	12	4
TOTALS	16638	18727	694	739	14848	17176	781	832	11880	14423	611	719
GRAND TOTAL				36798				33637				27633

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	845.0	1208.0	0.697	845.0	1208.0	0.697	845.0	1208.0	0.697
CV-RENAL	424.0	704.0	0.599	424.0	704.0	0.599	424.0	704.0	0.599
HEART	294.0	491.0	0.598	294.0	491.0	0.598	294.0	491.0	0.598
NON CV-R	421.0	504.0	0.835	421.0	504.0	0.835	421.0	504.0	0.835
CANCER	131.0	194.0	0.675	131.0	194.0	0.675	131.0	194.0	0.675

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS AREA RANK	JAN. MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANNUAL PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARCINATE HARDNESS	FLUORIDATION STATUS	POPULATED IN 1953
OHIO	3439	2265	3922	INDEPENDENT	INDEPENDENT	34	76	41	96	PPM	72	PPM	72	PPM	72

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	305	269	31	16	330	309	53	49	234	254	58	57
1-4	1168	1062	69	83	1289	1147	227	250	984	937	188	224
5-9	1025	1023	96	97	1342	1260	232	206	1285	1283	351	310
10-14	858	844	62	68	1255	1200	162	164	1395	1305	301	336
15-19	750	873	52	64	894	1047	100	122	1158	1298	235	215
20-24	911	1080	79	84	911	853	81	103	1010	1267	119	151
25-29	1082	1181	99	91	791	819	106	131	855	894	117	141
30-34	996	1039	91	100	878	874	141	150	674	671	120	124
35-39	1012	997	88	64	939	1014	134	118	632	676	114	147
40-44	905	941	52	57	897	955	92	96	750	845	134	144
45-49	882	837	61	48	918	947	73	70	839	927	143	117
50-54	800	821	48	30	791	853	58	67	742	890	92	96
55-59	768	884	26	19	734	752	53	64	755	825	72	62
60-64	681	683	27	20	649	700	30	32	599	738	47	54
65-69	474	579	32	19	558	743	29	19	466	632	38	47
70-74	364	514	6	12	416	542	23	21	352	563	28	27
75-79*	324	512	3	3	262	409	11	8	251	483	17	10
80-84*	0	0	0	0	134	228	3	7	164	288	8	14
85-UP	43	89	1	1	65	141	2	2	92	182	4	7
TOTALS	13348	14228	923	876	13887	14813	1610	1679	13247	14958	2186	2283
GRAND TOTAL				29375				31989				32674

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	1959	1960	1961	1969	1970	1971	1971	SDM	SDM	SDM
TOTAL	327	366	427	413	438	450	427	376	376	1253	1253	1253
CV-RENAL	169	190	229	232	264	225	217	192	192	634	634	634
HEART	108	123	130	130	164	158	143	133	133	434	434	434
NON CV-R	158	176	198	181	174	225	210	184	184	619	619	619
CANCER	47	56	75	75	61	77	75	57	57	209	209	209

CITY CHARACTERISTICS

CODE

STATE	OHIO
1950 RANK BY POPULATION	412
1950 POP/50. MILE	4024
1970 POP/50. MILE	3591
1949 MED. FAM. INCOME	3452
1969 MED. FAM. INCOME	3964
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	74
MEAN ANN. PRECIPITATION	33
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	124 PPM
NON-CARBONATE HARDNESS	33 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	TOTAL		TOTAL		TOTAL	
TOTAL	OBSERVED	693.0	1278.0	1253.0		
	EXPECTED*	602.5	1048.0	1117.1		
	OBS/EXP	1.150	1.219	1.122		
CV-RENAL	OBSERVED	359.0	725.0	634.0		
	EXPECTED*	337.1	592.4	650.5		
	OBS/EXP	1.065	1.224	0.975		
HEART	OBSERVED	231.0	449.0	434.0		
	EXPECTED*	240.1	418.0	452.0		
	OBS/EXP	0.962	1.074	0.960		
NON CV-R	OBSERVED	334.0	553.0	619.0		
	EXPECTED*	265.4	455.7	466.7		
	OBS/EXP	1.258	1.214	1.326		
CANCER	OBSERVED	103.0	211.0	209.0		
	EXPECTED*	96.8	163.0	168.4		
	OBS/EXP	1.064	1.294	1.241		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE
1T-1	184	163	1	1	240	189	0	0	164	163	36	37
1-4	949	811	1	0	1016	1034	1	1	717	705	167	153
5-9	1016	1029	2	2	1453	1530	5	6	1141	1084	304	284
10-14	952	884	3	1	1807	1713	5	4	1488	1402	333	327
15-19	726	765	0	19	1164	1216	5	7	1328	1260	243	293
20-24	574	687	6	76	502	601	3	18	694	748	115	134
25-29	662	812	7	53	603	748	5	26	692	816	98	177
30-34	704	993	13	68	860	1018	7	27	640	800	168	241
35-39	889	1190	18	67	991	1328	12	26	735	815	221	279
40-44	1147	1385	17	55	1243	1477	11	39	879	1104	255	310
45-49	1112	1378	7	49	1380	1626	14	36	1024	1233	234	198
50-54	1176	1299	7	36	1403	1570	7	34	1043	1161	125	155
55-59	1115	1115	7	24	1240	1425	7	34	1006	1126	88	101
60-64	767	808	5	16	1027	1252	3	17	937	1107	51	74
65-69	488	533	3	9	866	1067	3	7	710	1038	39	63
70-74	278	371	1	1	579	687	0	8	552	830	22	29
75-79*	199	362	0	2	288	425	1	1	392	588	14	30
80-84*	0	0	0	0	105	206	0	0	207	283	11	5
85-UP	44	77	1	0	64	136	0	1	96	172	4	8
TOTALS	12982	14662	99	479	16831	19248	89	292	14445	16435	2528	2898
GRAND TOTAL				28222				36460				36306

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	424.0	536.9	0.790	1062.0	1214.0	0.875	1136.0	1405.9	0.804
CV-RENAL	241.0	298.2	0.808	620.0	696.7	0.887	656.0	831.6	0.789
HEART	157.0	171.2	0.923	455.0	506.0	0.899	492.0	585.2	0.841
NON CV-R	183.0	238.7	0.767	442.0	515.3	0.858	474.0	571.3	0.825
CANCER	96.0	96.0	1.000	197.0	214.3	0.919	217.0	227.8	0.952

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1969				1971			
	1949	1950	1951	1952	1959	1960	1961	1962	1969	1970	1971	1972	1971	1972	1973	1974
TOTAL	213	211	211	211	342	354	366	1062	411	367	352	352	1130	1130	1130	1130
CV-RENAL	124	117	117	117	203	208	209	620	250	214	192	192	656	656	656	656
HEART	91	66	66	66	141	159	155	455	187	158	147	147	492	492	492	492
NON CV-R	89	94	94	94	139	146	157	442	161	153	160	160	474	474	474	474
CANCER	49	47	47	47	55	65	77	197	73	64	80	80	217	217	217	217

CITY CHARACTERISTICS

CODE

STATE	OHIO
1950 RANK BY POPULATION	432
1950 POP/SQ. MILE	4342
1970 POP/SQ. MILE	5763
1949 MED. FAM. INCOME	8109
1969 MED. FAM. INCOME	19928
URBAN CLASS	PRINCE
1950 URBAN AREA RANK	10
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	73
MEAN ANN. PRECIPITATION	32
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	128 PPM
NON-CARBONATE HARDNESS	43 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1956

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NN	NF	NN	NF	WM	WF	NN	NF	NN	NF
LT 1	798	748	105	115			772	723	153	154		
1-4	2888	2867	397	392			2965	2987	619	682		
5-9	2495	2493	404	416			3550	3560	751	749		
10-14	2200	2163	360	383			3139	3122	560	543		
15-19	1851	2217	323	354			2321	2783	376	412		
20-24	1570	2983	355	392			2158	2537	265	342		
25-29	1540	2167	409	373			2146	2091	301	383		
30-34	2631	2527	345	408			2301	2431	380	476		
35-39	2303	2503	326	341			2081	2231	321	372		
40-44	2152	2167	304	329			2020	2175	330	380		
45-49	1846	2018	261	269			1837	2089	277	309		
50-54	1634	1807	236	217			1719	1861	258	239		
55-59	1479	1577	183	202			1315	1639	189	228		
60-64	1086	1363	154	164			1169	1604	199	222		
65-69	805	1000	109	108			995	1345	129	168		
70-74	757	1042	76	96			630	966	75	113		
75-79#	0	0	0	0			343	573	44	51		
80-84#	0	0	0	0			218	365	22	42		
85-UP	131	230	14	21			33469	37353	5619	6282		
TOTALS	33097	35665	4689	5057								
GRAND TOTAL				78508						82723		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1772.0	1543.1	1.148	2305.0	1763.6	1.051	3189.0	2984.2	1.069
CV-RENAL									
OBSERVED	944.0			1646.0			1803.0		
EXPECTED*	846.2			1575.4			1759.6		
OBS/EXP	1.116			1.045			1.025		
HEART									
OBSERVED	644.0			1087.0			1276.0		
EXPECTED*	594.9			1093.9			1206.4		
OBS/EXP	1.083			0.994			1.058		
NOW CV-R									
OBSERVED	828.0			1259.0			1386.0		
EXPECTED*	696.9			1188.2			1224.6		
OBS/EXP	1.188			1.060			1.132		
CANCER									
OBSERVED	255.0			503.0			499.0		
EXPECTED*	240.6			417.4			436.4		
OBS/EXP	1.060			1.205			1.144		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	50#	SUM	1960	1961	60#	SUM	1970	1971	70#	SUM
TOTAL	892	880	1772		968	965	2905		1047	1083	3189	
CV-RENAL	478	466	944		563	561	1646		568	633	1803	
HEART	333	311	644		366	353	1087		416	449	1276	
NOW CV-R	144	144	828		172	172	503		172	181	499	
CANCER	120	135	255		172	172	503		172	181	499	

CITY CHARACTERISTICS

CODE

STATE	OHIO
RANK BY POPULATION	14788
1950 POP./SQ. MILE	4906
1970 POP./SQ. MILE	3396
1949 MED. FAM. INCOME	9111
1969 MED. FAM. INCOME	9111
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	140
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	79
MEAN ANN. PRECIPITATION	39
LAND RESOURCE REGION	M
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDSNESS	332 PPM
NON-CARBONATE HARDSNESS	70 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960		
	WM	WF	NP	WM	WF	NP
1	358	303	21	284	247	47
1-4	1213	1185	144	1038	976	189
5-9	1147	1155	128	1131	1214	232
10-14	1045	1079	133	1178	1157	179
15-19	908	1037	90	894	1019	140
20-24	1126	1316	113	124	885	104
25-29	1344	1471	98	125	719	126
30-34	1317	1440	118	129	880	123
35-39	1253	1340	98	125	1072	116
40-44	1116	1255	99	114	1176	109
45-49	1106	1039	130	111	1148	117
50-54	1058	968	113	87	1031	91
55-59	972	873	94	66	814	80
60-64	845	703	62	60	775	90
65-69	640	572	32	33	757	74
70-74	404	411	19	61	670	52
75-79	404	404	18	461	538	61
80-84	316	360	15	20	458	29
85-89	0	0	20	308	338	25
90-94	0	0	8	138	192	7
95-99	37	51	0	59	168	2
TOTALS	16205	16618	1490	13910	14926	1794
GRAND TOTAL	15597	15872	13572	13910	14926	1865
						32495

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUR	1959	1960	1961	59-61 SUR
TOTAL	437	417	844	426	430	408	1264
CV-RENAL	225	215	440	264	244	243	748
HEART	169	156	325	196	181	185	562
NON CV-R	43	202	404	165	186	155	516
CANCER	61	61	122	49	79	63	191

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	844.6	1264.0	1295.0
EXPECTED*	642.8	1080.3	1210.4
OBS/EXP	1.313	1.170	1.070
CV-RENAL			
OBSERVED	440.0	748.0	712.0
EXPECTED*	344.6	609.2	718.9
OBS/EXP	1.279	1.228	0.990
HEART			
OBSERVED	325.0	562.0	529.0
EXPECTED*	248.8	433.0	502.0
OBS/EXP	1.306	1.298	1.054
NON CV-P			
OBSERVED	404.0	516.0	583.0
EXPECTED*	298.9	471.1	491.4
OBS/EXP	1.352	1.095	1.186
CANCER			
OBSERVED	122.0	191.0	228.0
EXPECTED*	107.2	175.0	195.0
OBS/EXP	1.138	1.091	1.200

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	OHIO
1950 BANK BY POPULATION	337
1950 POP/50. MILE	6185
1970 POP/50. MILE	3578
1949 PER. INCOME	3601
1969 MED. P.M. INCOME	9342
URBAN CLASS	INDEPENDENT
1950 URBAN AREA BANK	-
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	74
MEAN AN. PRECIPITATION	41
LAND RESOURCE REGION	N
WATER SOURCE	SURFACE
TOTAL HARDNESS	111 PPM
NON-CARBONATE HARDNESS	96 PPM
FLUORIDATION STATUS	FLOIDATED

POPULATION													DEATHS AND DEATH RATIOS					
BY AGE, RACE, SEX AND CENSUS YEAR													BY CAUSE AND CENSUS PERIOD					
AGE GROUP	1950						1960						CAUSE	1949-50		1959-61		1969-71
	WM	WF	NM	NF	WM	NF	WM	NF	WM	NF	WM	NF		TOTAL	OBSERVED	EXPECTED*	OBS/EXP	
LT 1	2692	2492	297	352	2975	2779	586	627	3032	2934	660	635						
1-4	10621	10405	1157	1111	11759	11136	2469	2490	11235	10637	2449	2336						
5-9	10131	9482	1105	1131	12838	12708	2674	2598	15221	14207	3365	3323						
10-14	8371	8183	931	902	11646	11471	1889	1947	15902	15368	3376	3486						
15-19	7558	8340	724	868	10430	9504	1247	1427	14923	14796	2814	2903						
20-24	9690	10702	1039	1228	6966	8278	1167	1338	12196	14374	1896	1920						
25-29	10745	11535	1160	1308	7415	7360	1191	1557	10456	10440	1513	1922						
30-34	9970	10803	998	1164	8526	8531	1430	1686	8192	8123	1372	1654						
35-39	9981	10571	1016	1164	8954	9554	1357	1573	7528	7832	1371	1674						
40-44	9837	10176	946	964	8538	9378	1150	1269	9279	9675	1427	1717						
45-49	9526	9522	948	813	8575	9091	1098	1086	9723	10631	1332	1504						
50-54	9209	9080	712	612	8112	8669	936	938	9066	10395	1091	1233						
55-59	8630	8421	577	461	7630	8206	844	768	8489	9625	973	1054						
60-64	7110	7036	337	286	6773	7360	573	566	7450	8822	787	896						
65-69	5356	5901	280	276	6002	6998	478	503	5777	7425	668	801						
70-74	3433	4272	143	155	4374	5540	276	324	4378	6337	435	527						
75-79#	3061	4175	125	118	2581	3751	179	175	3084	4953	250	357						
80-84#	487	762	0	0	1286	2084	62	91	1582	2991	115	178						
85-UP	487	762	20	22	642	1160	49	65	842	1878	129	159						
TOTALS	136408	141858	12515	12835	134022	143558	19395	21028	157625	171443	25971	28779						
GRAND TOTAL				303616				318003				383818						
* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED																		
* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES																		
CITY CHARACTERISTICS													CODE					
STATE													OHIO					
1950 RANK BY POPULATION													7027					
1950 POP/SQ. MILE													4727					
1940 POP/SQ. MILE													4727					
1940 MED. FAM. INCOME													3968					
1969 MED. FAM. INCOME													10474					
URBAN CLASS. AREA													CENTRAL					
1950 URBAN AREA RANK													37					
JAN. MEAN TEMPERATURE													26					
JULY MEAN TEMPERATURE													73					
MEAN ANNU. PRECIPITATION													31					
LAND RESOURCE REGION													I					
WATER SOURCE													SURFACE					
TOTAL HARDNESS													170 PPM					
NON-CARBONATE HARDNESS													56 PPM					
FLUORIDATION STATUS													FLUORIDATED IN 1955					

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NF	WM	WP	NM	NF	WM	WP	NM	NF
LT 1	476	463	58	50	611	626	114	112	513	541	107	77
1-4	1863	1793	203	203	2385	2355	436	410	1876	1876	378	411
5-9	1751	1639	210	205	2593	2556	468	468	2436	2436	613	594
10-14	1402	1329	210	162	2182	2206	328	309	2653	2555	575	593
15-19	1293	1366	146	163	1451	1744	230	266	2227	2407	463	528
20-24	1545	1892	173	221	1411	1714	198	263	1899	2473	257	360
25-29	1951	2186	230	218	1679	1639	231	257	1783	1820	245	305
30-34	1954	2104	172	210	1763	1857	272	286	1385	1470	212	231
35-39	1506	1841	181	169	1868	2057	240	224	1399	1416	209	282
40-44	1531	1510	153	141	1777	1983	187	228	1564	1706	241	298
45-49	1304	1419	145	123	1637	1723	182	181	1668	1911	216	212
50-54	1378	1354	129	96	1417	1437	129	128	1553	1772	168	204
55-59	1330	1189	74	57	1129	1278	128	136	1372	1527	157	143
60-64	1104	1002	56	43	1097	1212	114	80	1079	1247	114	121
65-69	827	798	44	38	993	1047	68	71	711	1072	106	133
70-74	449	509	18	20	734	850	44	41	654	921	86	80
75-79*	399	465	17	20	456	522	28	24	505	714	28	40
80-84*	0	0	0	0	177	248	9	7	289	473	19	21
85-UP	62	109	3	2	104	156	4	8	151	261	15	26
TOTALS	22365	23097	2213	2181	25477	27274	3398	3499	25951	28595	4209	4739
GRAND TOTAL				49856				59648				63494

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	1959	1960	1961	1960	1969	1970	1971	SUM	1971	SUM
TOTAL	456	489	603	629	595	1827	706	695	714	2115	402	1193
CV-RENAL	224	256	341	339	329	1009	403	388	388	1193	297	884
HEART	228	182	220	234	217	671	294	297	312	922	307	922
NON-CV-R	228	233	262	290	266	818	303	307	312	922	118	354
CANCER	73	64	86	114	103	303	122	114	118	354		

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	945.0	856.5	1.105		945.0	856.5	1.076		945.0	856.5	1.062	
CV-RENAL	484.0	453.5	1.067		484.0	453.5	1.067		484.0	453.5	1.067	
HEART	343.0	326.9	1.049		343.0	326.9	1.049		343.0	326.9	1.049	
NON CV-R	461.0	402.1	1.146		461.0	402.1	1.146		461.0	402.1	1.146	
CANCER	137.0	139.9	0.979		137.0	139.9	0.979		137.0	139.9	0.979	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	OHIO
1950 RANK BY POPULATION	2333
1950 POP/SQ. MILE	5797
1970 POP/SQ. MILE	5291
1949 MED. FAM. INCOME	8538
1969 MED. FAM. INCOME	10404
URBAN CLASS.	PRIME
1950 URBAN AREA RANK	43
JAN MEAN TEMPERATURE	27
MEAN ANNUAL PRECIPITATION	37
WATER RESOURCES REGION	R
SURFACE	
TOTAL HARDNESS	128 PPM
NON-CARBONATE HARDNESS	84 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	NM	NP
1-4	397	380	32	20
5-9	1520	1641	129	121
10-14	1477	1484	127	117
15-19	1276	1337	123	113
20-24	1164	1310	88	105
25-29	1374	1711	88	100
30-34	1476	1538	96	113
35-39	1395	1494	93	76
40-44	1196	1392	82	56
45-49	1253	1368	80	50
50-54	1090	1214	53	50
55-59	1000	1033	65	75
60-64	847	982	36	45
65-69	717	893	47	39
70-74	606	833	39	31
75-79	518	687	24	23
80-84	548	751	32	27
85-89	0	0	0	0
90-94	97	145	4	4
TOTALS	17965	20113	1238	1201
GRAND TOTAL				40517

1960				
MM	RP	NR	NP	
407	420	41	57	
1599	1557	180	178	
1717	1739	183	184	
1512	1564	169	156	
1149	1350	115	104	
939	1199	73	104	
6963	1058	70	73	
1684	1688	81	93	
1083	1175	92	105	
1043	1188	77	81	
946	1105	66	66	
953	1169	81	54	
836	1023	52	56	
724	890	54	44	
618	839	42	45	
491	710	37	37	
343	588	21	25	
331	354	16	7	
118	236	4	6	
16756	19392	1454	1475	
			39077	

1970	NP	NM	NP	NM
285	297	40	45	
1014	1014	132	128	
1337	1337	191	182	
346	346	180	202	
1304	1304	146	153	
1319	1319	40	118	
206	206	60	65	
623	623	900	95	
1385	1385	676	65	
847	847	73	95	
648	648	73	65	
689	689	64	75	
56	56	64	73	
750	750	67	80	
826	826	62	77	
787	787	62	77	
956	956	62	77	
70	70	59	78	
858	858	59	51	
670	670	73	51	
960	960	31	35	
662	662	45	42	
911	911	45	38	
562	562	21	35	
489	489	37	35	
618	618	25	14	
303	303	10	1565	
373	373	1430	33045	
178	178			
37	37			
290	290			
129	129			
699	699			
16351	16351			

Cause	1949-50	1959-61
TOTAL		
OBSERVED	1007.0	1517.0
EXPECTED*	876.2	1403.7
OBS/EXP	1.157	1.081
CV-RENAL		
OBSERVED	546.0	891.0
EXPECTED*	499.2	820.4
OBS/EXP	1.094	1.086
HEART		
OBSERVED	383.0	621.0
EXPECTED*	350.7	570.6
OBS/EXP	1.092	1.088
NON CV-R		
OBSERVED	461.0	626.0
EXPECTED*	371.0	583.3
OBS/EXP	1.243	1.073
CANCER		
OBSERVED	125.0	210.0
EXPECTED*	134.9	202.0
OBS/EXP	0.926	0.997

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF
LT 1	442	413	20	22	433	451	31	37	320	329	26	28	320	329	26	28	320	329
1-4	1645	1486	91	92	1584	1605	117	132	1378	1399	128	151	1378	1399	128	151	1378	1399
5-9	1427	1339	90	66	1295	1686	128	126	1324	1631	163	181	1324	1631	163	181	1324	1631
10-14	1061	1069	60	58	1579	1467	188	78	1705	1920	128	139	1705	1920	128	139	1705	1920
15-19	1058	1264	47	58	1207	1471	53	77	1637	2085	77	109	1637	2085	77	109	1637	2085
20-24	144	1634	36	65	1181	1163	49	64	1487	1459	74	65	1487	1459	74	65	1487	1459
25-29	1492	1316	40	62	1114	1209	36	61	1053	1123	57	63	1053	1123	57	63	1053	1123
30-34	1402	1313	44	51	1100	1155	39	52	1054	1041	47	66	1054	1041	47	66	1054	1041
35-39	1075	1187	49	51	1043	1112	39	42	1103	1214	34	78	1103	1214	34	78	1103	1214
40-44	1051	1140	34	39	1038	1107	39	49	1122	1197	61	67	1122	1197	61	67	1122	1197
45-49	934	1069	32	39	1038	1107	39	42	1122	1197	61	67	1122	1197	61	67	1122	1197
50-54	845	931	34	31	907	1065	33	45	1020	1179	53	54	1020	1179	53	54	1020	1179
55-59	649	797	17	22	847	1035	34	39	1009	1159	46	45	1009	1159	46	45	1009	1159
60-64	610	689	19	19	736	933	27	24	894	1151	39	53	894	1151	39	53	894	1151
65-69	492	628	19	29	635	801	17	22	736	1097	41	51	736	1097	41	51	736	1097
70-74	362	481	9	15	484	689	15	13	559	844	27	31	559	844	27	31	559	844
75-79*	382	529	16	22	327	522	8	20	368	673	9	31	368	673	9	31	368	673
80-84*	0	0	0	0	207	330	4	3	231	425	8	11	231	425	8	11	231	425
85-UP	95	92	2	3	134	197	6	6	138	305	11	21	138	305	11	21	138	305
TOTALS	16640	17944	665	768	17525	19484	846	1004	19413	22024	1193	1378	19413	22024	1193	1378	19413	22024
GRAND TOTAL				36017				38859				44008				44008		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	670.0	1181.0	0.566	670.0	1181.0	0.566	1447.0	1597.7	0.906
CV-RENAL	361.0	654.0	0.552	361.0	654.0	0.552	831.0	957.1	0.868
HEART	228.0	473.0	0.482	228.0	473.0	0.482	587.0	665.2	0.882
NON CV-F	309.0	527.0	0.588	309.0	527.0	0.588	616.0	640.6	0.962
CANCER	99.0	197.0	0.503	99.0	197.0	0.503	230.0	242.3	0.949

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	OKLAHOMA
1950 RANK BY POPULATION	33478
1950 FCE/SQ. MILE	1878
1950 FCE/SQ. MILE	1073
1949 MED. FAM. INCOME	3097
1949 MED. FAM. INCOME	8323
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	36
JULY MEAN TEMPERATURE	82
MEAN ANN. PRECIPITATION	29
LAND RESOURCE REGION	H
WATER SOURCE	GROUND
TOTAL HARDNESS	172 PPM
NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1967

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	510	503	60	56	980	993	169	149	794	786	148	164
1-4	1777	1691	229	190	3248	3120	569	557	2460	2292	582	585
5-9	1478	1481	186	199	3077	2913	530	498	3251	3187	783	798
10-14	1046	874	148	160	2344	2308	338	282	3259	3155	723	788
15-19	969	1098	127	168	1756	2194	225	266	2430	3275	626	706
20-24	1181	1607	117	222	2762	2921	208	334	4650	4509	524	573
25-29	1690	1883	187	257	2325	2365	286	388	2701	2556	312	448
30-34	1687	1410	159	191	2113	2116	241	306	1795	1964	278	406
35-39	1242	1172	128	153	1831	2017	227	250	1726	1879	265	464
40-44	847	973	97	98	1757	1518	163	186	1579	1775	214	316
45-49	672	707	72	105	1326	1227	144	153	1399	1684	177	241
50-54	482	583	65	56	768	790	76	103	1426	1308	167	153
55-59	356	429	59	52	722	676	57	57	1061	1146	149	153
60-64	345	409	53	30	624	564	49	66	974	1032	120	124
65-69	315	349	52	40	428	524	48	66	816	632	70	120
70-74	210	274	22	19	258	434	38	28	515	513	50	57
75-79*	236	266	10	20	195	287	28	19	217	409	39	47
80-84*	0	0	0	0	99	164	14	12	122	241	18	17
85-UP	42	33	2	2	76	109	10	11	52	182	8	22
TOTALS	15287	15733	1766	1971	26844	27617	3465	3771	30596	32453	5239	6182
GRAND TOTAL				34757				61697				74470

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	458.0	472.3	0.970		1093.0	1185.7	0.922		1390.0	1481.4	0.938	
CV-RENAL	189.0	226.0	0.835		467.0	504.3	0.926		608.0	711.0	0.856	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
HEART	126.0	160.1	0.787		325.0	382.0	0.851		438.0	511.2	0.857	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
NON CV-R	269.0	245.9	1.094		626.0	642.5	0.974		742.0	749.9	0.989	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
CANCER	54.0	69.3	0.780		160.0	215.4	0.744		202.0	215.4	0.938	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50	59-61	1969	1970	1971	69-71	
TOTAL	203	255	458	596	455	474	461	1390	OKLAHOMA
CV-RENAL	90	99	189	238	208	228	212	648	1950 RANK BY POPULATION 350
HEART	63	63	126	156	138	157	143	438	1950 POP/SQ. MILE 4514
NON CV-R	113	156	269	325	247	286	249	742	1970 POP/SQ. MILE 2387
CANCER	26	28	54	61	65	59	78	202	1949 MED. FAM. INCOME 2926
									1969 MED. FAM. INCOME 7259
									URBAN CLASS INDEPENDENT
									1950 URBAN AREA RANK -
									JAN MEAN TEMPERATURE 40
									JULY MEAN TEMPERATURE 82
									MEAN ANN. PRECIPITATION 30
									LAND RESOURCE REGION H
									WATER SOURCE SURFACE
									TOTAL HARDNESS 144 PPM
									NON-CARBONATE HARDNESS 12 PPM
									FLOODINATION STATUS NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	311	289	58	70	263	281	105	112	215	221	82	65
1-4	1208	1249	271	330	1037	1086	375	429	754	742	289	321
5-9	1215	1183	310	399	1417	1353	429	474	1181	1135	464	479
10-14	989	969	288	311	1341	1331	395	431	1225	1203	505	513
15-19	865	1034	262	334	957	1054	305	364	1210	1186	459	488
20-24	855	1252	183	236	693	807	129	234	839	1012	207	321
25-29	1182	1250	189	262	732	827	132	207	789	826	135	239
30-34	1067	1164	193	247	850	938	155	192	657	689	131	187
35-39	1078	1136	193	305	985	1040	173	269	624	752	131	216
40-44	920	1094	200	275	918	1001	140	235	725	865	160	218
45-49	881	949	203	315	883	971	213	279	849	983	163	233
50-54	819	856	210	238	823	949	203	260	794	928	195	252
55-59	727	797	251	209	743	877	175	291	770	925	192	279
60-64	640	678	197	194	652	729	181	259	715	923	173	289
65-69	511	602	190	241	632	768	225	221	621	862	187	298
70-74	377	469	136	130	516	611	183	195	470	661	149	241
75-79*	378	469	120	110	299	432	106	145	344	565	135	163
80-84*	0	0	0	0	191	277	74	70	230	397	98	128
85-89*	56	75	13	22	113	168	53	48	169	308	75	107
TOTALS	14079	15515	3467	4228	14045	15580	3751	4683	13181	15183	3930	5037
GRAND TOTAL				37289				38059				37331

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	862.0	1488.0	1680.0	804.9	1537.6	1800.5	1.071	0.968	0.933
CV-RENAL	442.0	768.0	921.0	448.1	898.3	1105.1	0.986	0.855	0.833
HEART	288.0	518.0	612.0	310.4	704.1	862.2	0.928	0.843	0.822
NON CV-R	420.0	720.0	759.0	350.8	695.4	1091	1.177	1.126	1.091
CANCER	108.0	242.0	284.0	125.2	228.6	255.2	0.863	1.059	1.113

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	1979
TOTAL	424	438	862	474	534	480	1488	571	559	550	1680	550
CV-RENAL	208	234	442	234	265	269	768	295	327	299	921	299
HEART	131	157	288	161	171	186	518	198	210	204	612	204
NON CV-R	216	204	420	240	269	211	720	276	232	251	759	251
CANCER	53	55	108	89	77	76	242	104	90	90	284	90

CITY CHARACTERISTICS

CODE

STATE	OKLAHOMA
1950 RANK BY POPULATION	322
1950 POP./SQ. MILE	3844
1970 POP./SQ. MILE	1659
1949 MED. FAM. INCOME	2724
1969 MED. FAM. INCOME	6970
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	38
JULY MEAN TEMPERATURE	82
MEAN ANN. PRECIPITATION	41
LAND RESOURCE REGION	H
WATER SOURCE	SURFACE
TOTAL HARDNESS	88 PPM
NON-CARBONATE HARDNESS	50 PPM
FLOOD/DRAIN STATUS	NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE 1949-50 1959-61 1969-71

CAUSE	1949-50	1959-61	1969-71
TOTAL	4062.0	9007.0	10873.0
OBSERVED	3928.6	9046.4	11213.1
EXPECTED*	1.034	0.996	0.970
OBS/EXP			
CV-RENAL			
OBSERVED	1973.0	4009.0	5451.0
EXPECTED*	2057.3	4869.4	6327.0
OBS/EXP	0.959	0.823	0.862
HEART			
OBSERVED	1339.0	2550.0	3728.0
EXPECTED*	1464.3	3032.2	4405.6
OBS/EXP	0.914	0.743	0.846
NON CV-R			
OBSERVED	2089.0	4998.0	5422.0
EXPECTED*	1871.4	4177.1	4866.1
OBS/EXP	1.116	1.197	1.110
CANCER			
OBSERVED	618.0	1430.0	1873.0
EXPECTED*	637.6	1402.7	1718.3
OBS/EXP	0.985	1.019	1.090

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

OKLAHOMA

STATE	1950 RANK BY POPULATION	45
1950 POP/50. MILE	4793	
1970 POP/50. MILE	577	
1949 MED. FAM. INCOME	3248	
1969 MED. FAM. INCOME	9106	
URBAN CLASS	CENTRAL	
1950 URBAN AREA RANK	45	
JAN MEAN TEMPERATURE	37	
JULY MEAN TEMPERATURE	82	
MEAN ANN. PRECIPITATION	30	
LAND RESOURCE REGION	H	
WATER SOURCE	GROUND AND SURFACE	
TOTAL HARDNESS	90 PPM	
NON-CARBONATE HARDNESS	49 PPM	
FLUORIDATION STATUS	FLUORIDATED IN 1954	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	2338	2323	318	345	3255	3020	777	793	2684	2611	738	675
1-4	9155	8968	1130	1072	12416	11812	2766	2759	9570	9171	2657	2655
5-9	8689	8552	928	935	13959	13514	2792	2746	14067	13519	3915	3966
10-14	7138	6967	765	754	11846	12065	2063	2125	14351	13949	3780	3783
15-19	6379	7617	618	856	8715	10086	1259	1548	12679	13238	2741	3068
20-24	8366	10494	765	1128	8800	10018	1162	1645	11593	13934	1920	2674
25-29	10017	10614	990	1243	9337	9667	1235	1632	11226	11243	1736	2045
30-34	8539	9144	930	1082	9832	10036	1210	1558	8899	9077	1439	1904
35-39	8246	9257	956	1083	10013	10221	1277	1456	8436	8800	1318	1677
40-44	8275	8686	849	936	8525	9075	1100	1221	9194	9718	1337	1671
45-49	6953	7703	762	730	8198	9338	1049	1120	9554	10111	1356	1519
50-54	5966	6400	568	521	7961	8662	925	1049	8087	8941	1045	1254
55-59	4724	5203	378	357	6811	7719	770	809	7222	8879	944	1170
60-64	3745	4251	281	282	5418	6189	504	579	6634	8122	816	1034
65-69	2969	3499	249	316	4185	5254	434	460	4967	6710	659	865
70-74	1930	2399	145	139	3030	4229	320	367	3460	5242	451	617
75-79*	1836	2525	116	124	1903	2771	188	240	2116	3817	246	357
80-84*	0	0	0	0	910	1572	102	111	1162	2384	177	228
85-UP	270	502	21	23	571	1038	72	59	732	1614	132	209
TOTALS	105535	115304	10769	11896	135685	146286	20005	22277	146623	161080	27407	31371
GRAND TOTAL				243504				324253				366481

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	9309	2123	4062	2873	3089	3045	9007	3591	3648	3634	10873
CV-RENAL	1900	1073	1973	1331	1347	1347	4009	1781	1843	1827	5451
HEART	604	735	1339	842	830	878	2550	1204	1265	1259	3728
NON CV-R	1039	1050	2089	1542	1758	1698	4998	1810	1805	1807	5422
CANCER	290	328	618	462	495	473	1430	602	625	646	1873

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	1721	1564	232	222	2573	2418	373	358	2486	2239	564	518
1-4	6846	6545	829	824	10366	10267	1530	1504	9117	8763	2101	2010
5-9	6346	6212	740	768	12674	11973	1595	1625	13304	12816	2840	2734
10-14	5041	5005	617	581	10471	10216	1210	1258	14083	13467	2636	2711
15-19	4650	5549	521	766	7051	8162	838	915	12682	12682	2012	2201
20-24	6045	7408	646	879	9239	8189	930	953	10874	12682	1946	1946
25-29	7648	9018	695	881	9605	9744	724	1008	10874	12682	1946	1946
30-34	6591	7034	589	724	8900	9744	712	948	10874	12682	1946	1946
35-39	6078	6556	601	855	8900	9569	712	948	10874	12682	1946	1946
40-44	5906	6457	590	795	8900	9569	712	948	10874	12682	1946	1946
45-49	5827	6327	582	745	8900	9569	712	948	10874	12682	1946	1946
50-54	5072	5072	506	561	6032	6692	630	823	9538	9997	959	1187
55-59	4705	4705	466	506	5313	6143	586	671	7810	8302	783	1042
60-64	3863	4101	426	391	4179	4921	445	464	6471	7418	827	1074
65-69	2880	3215	266	239	3230	4144	392	405	5338	6428	669	897
70-74	2238	2512	237	286	2173	3143	236	244	3840	5389	671	863
75-79	1366	1664	128	156	1310	1998	137	156	2723	4440	416	547
80-84	1281	1790	125	162	1310	1998	137	156	1870	3134	277	351
85-UP	215	327	25	25	635	1053	47	86	968	2008	138	182
TOTALS	78821	85584	8414	9921	112728	122892	12066	13999	137485	149561	20649	23943
GRAND TOTAL				182740				261685				331638

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	3246.0	2934.7	1.099		6927.0	6656.8	1.041		8366.0	9448.4	0.885	
CV-RENAL	1561.0	1506.2	1.010		3375.0	3509.9	0.951		4285.0	5278.8	0.812	
HEART	989.0	1100.9	0.898		2219.0	2515.6	0.882		2986.0	3683.0	0.811	
NON CV-R	1685.0	1408.5	1.196		3552.0	3106.9	1.143		4081.0	4169.6	0.979	
CANCER	454.0	477.9	0.950		1166.0	1062.7	1.097		1535.0	1461.8	1.050	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

OKLAHOMA

STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
51	6844	1929	3503	9870	CENTRAL	60	37	82	37	J	SURFACE	91 PPM	FLUORIDATED IN 1953	7 PPM	FLUORIDATED

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960			1970		
	WM	WF	NP	WM	WF	NP	WM	WF	NP
IT 1	384	365	0	587	530	8	558	512	19
2	1357	1249	3	2011	1973	19	2018	1988	79
3	1196	1134	1	2324	2282	18	3250	2910	76
4	1136	1134	1	2009	1968	20	3211	3143	49
5-9	873	827	4	2283	2757	41	4312	4329	143
10-14	1248	1661	9	2629	2596	97	5451	5291	341
15-19	2222	2222	41	2629	2596	97	5451	5291	247
20-24	2536	2222	41	1733	1543	91	3169	2815	90
25-29	2000	1598	21	1733	1543	91	2029	1949	78
30-34	1387	1338	8	1533	1507	40	2029	1949	53
35-39	1164	1186	6	1520	1569	15	1714	1794	45
40-44	1195	1186	6	1428	1551	15	1824	1939	31
45-49	977	1016	9	1399	1503	11	1713	2083	39
50-54	856	962	2	1218	1254	7	1771	1928	25
55-59	775	830	1	1218	1254	7	1771	1928	15
60-64	631	734	0	981	1056	6	1521	1684	8
65-69	502	600	1	806	1012	4	1276	1433	9
70-74	316	489	1	687	901	3	868	1171	8
75-79	353	486	0	526	830	2	688	1150	6
80-84	0	0	0	375	550	3	471	849	2
85-89	0	0	0	203	322	0	314	563	2
90-94	0	0	0	133	220	0	240	453	5
95-99	69	112	0	133	220	0	240	453	5
TOTALS	17739	17955	131	24385	25924	400	36392	37984	1131
GRAND TOTAL	17739	17955	131	24385	25924	400	36392	37984	1131
			54			268			839
		35879				50977			76346

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	819.0	1209.0	1961.0
EXPECTED*	623.5	1436.0	2172.1
OBS/EXP	1.314	0.842	0.503
CV-CERIAL			
OBSERVED	410.0	668.0	1046.0
EXPECTED*	343.4	810.9	1267.3
OBS/EXP	1.194	0.824	0.825
HEART			
OBSERVED	284.0	455.0	708.0
EXPECTED*	244.1	571.4	882.6
OBS/EXP	1.163	0.796	0.802
NON CV-R			
OBSERVED	409.0	541.0	915.0
EXPECTED*	280.1	625.2	904.7
OBS/EXP	1.460	0.865	1.011
CANCER			
OBSERVED	138.0	218.0	352.0
EXPECTED*	98.3	219.8	324.3
OBS/EXP	1.404	0.992	1.086

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	423	396	819	436	370	403	1209	609	664	688	1961
CV-REVAL	202	208	410	236	218	214	668	331	369	346	1046
15-24	143	141	284	162	143	150	455	256	254	228	708
25-34	221	188	409	200	152	189	541	278	295	342	915
35-44	73	65	138	89	55	74	198	95	120	137	352
45-64	27	23	50	28	20	25	73	34	37	40	111
65-74	2	1	3	1	1	1	3	1	1	1	3
75-84	1	1	2	1	1	1	3	1	1	1	3
85-94	1	1	2	1	1	1	3	1	1	1	3
95-104	1	1	2	1	1	1	3	1	1	1	3
105-114	1	1	2	1	1	1	3	1	1	1	3
115-124	1	1	2	1	1	1	3	1	1	1	3
125-134	1	1	2	1	1	1	3	1	1	1	3
135-144	1	1	2	1	1	1	3	1	1	1	3
145-154	1	1	2	1	1	1	3	1	1	1	3
155-164	1	1	2	1	1	1	3	1	1	1	3
165-174	1	1	2	1	1	1	3	1	1	1	3
175-184	1	1	2	1	1	1	3	1	1	1	3
185-194	1	1	2	1	1	1	3	1	1	1	3
195-204	1	1	2	1	1	1	3	1	1	1	3
205-214	1	1	2	1	1	1	3	1	1	1	3
215-224	1	1	2	1	1	1	3	1	1	1	3
225-234	1	1	2	1	1	1	3	1	1	1	3
235-244	1	1	2	1	1	1	3	1	1	1	3
245-254	1	1	2	1	1	1	3	1	1	1	3
255-264	1	1	2	1	1	1	3	1	1	1	3
265-274	1	1	2	1	1	1	3	1	1	1	3
275-284	1	1	2	1	1	1	3	1	1	1	3
285-294	1	1	2	1	1	1	3	1	1	1	3
295-304	1	1	2	1	1	1	3	1	1	1	3
305-314	1	1	2	1	1	1	3	1	1	1	3
315-324	1	1	2	1	1	1	3	1	1	1	3
325-334	1	1	2	1	1	1	3	1	1	1	3
335-344	1	1	2	1	1	1	3	1	1	1	3
345-354	1	1	2	1	1	1	3	1	1	1	3
355-364	1	1	2	1	1	1	3	1	1	1	3
365-374	1	1	2	1	1	1	3	1	1	1	3
375-384	1	1	2	1	1	1	3	1	1	1	3
385-394	1	1	2	1	1	1	3	1	1	1	3
395-404	1	1	2	1	1	1	3	1	1	1	3
405-414	1	1	2	1	1	1	3	1	1	1	3
415-424	1	1	2	1	1	1	3	1	1	1	3
425-434	1	1	2	1	1	1	3	1	1	1	3
435-444	1	1	2	1	1	1	3	1	1	1	3
445-454	1	1	2	1	1	1	3	1	1	1	3
455-464	1	1	2	1	1	1	3	1	1	1	3

CITY CHARACTERISTICS

OREGON	336	
STATE		
1950 BANK BY POPULATION		
1950 POP/50. MILE	38	
1970 POP/50. MILE	66	
1970 POP/50. MILE	37	
1949 MED. FAM. INCOME	A	
1949 MED. FAM. INCOME		
1950 URBAN CLASS		
1950 URBAN AREA RANK		
JAN MEAN TEMPERATURE	17	
JULY MEAN TEMPERATURE	17	
MEAN ANNUAL PRECIPITATION	17	
MEAN ANNUAL PRECIPITATION	17	
LAND RESOURCE REGION		
WATER SOURCE		
SURFACE		
TOTAL HARDNESS	17	
NON-CARBOVATE HARDNESS	0	
FLUORIDE	0	
UNCEFTAIN		
FLUORINATION STATUS		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	MM	MP
LT 1	408	392	0	0
1-4	1440	1436	0	2
5-9	1363	1314	3	6
10-14	1113	1140	11	5
15-19	1251	1475	5	7
20-24	1708	1823	13	9
25-29	1824	1618	18	6
30-34	1579	1480	16	4
35-39	1594	1579	19	4
40-44	1593	1585	12	4
45-49	1391	1477	17	3
50-54	1242	1366	6	7
55-59	1132	1258	6	2
60-64	1053	1198	4	2
65-69	837	1043	2	2
70-74	631	763	1	0
75-79#	638	876	2	1
80-84#	0	0	0	1
85-UP	132	182	3	1
TOTALS	20929	22007	141	63
GRAND TOTAL	43140			

1960	WM	MF	MM	NP
327	386	4	6	4
1459	1442	9	12	12
1832	1941	14	14	14
1933	1973	19	20	20
1754	2123	19	20	20
1506	1602	43	44	44
1391	1135	44	44	44
1249	1303	34	34	34
1507	1501	34	34	34
1534	1536	24	24	24
1457	1680	17	17	17
1523	1638	10	10	10
1333	1526	10	10	10
1147	1464	3	3	3
1055	1350	5	5	5
868	1191	4	4	4
605	911	7	7	7
342	522	0	3	3
199	316	2	1	1
23131	25530	299	182	182
			49142	49142

1970	MM	MF	NM	NP
	450	501	12	13
	1867	1769	43	39
	2750	2666	50	61
	3166	3042	63	61
	3191	3397	83	90
	2781	3269	86	52
	2418	2211	73	48
	1763	1672	59	44
	1667	1520	45	25
	1669	1858	43	27
	1930	2068	34	20
	1791	1912	26	12
	1627	1975	21	16
	1484	1863	13	10
	1204	1606	12	4
	931	1428	6	7
	611	1105	5	4
	398	724	0	1
	266	530	2	4
	31864	35216	678	538
				68296

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	898.0	1716.0	2576.0
EXPECTED*	1000.6	2008.6	2541.7
OBS/EXP	0.897	0.854	1.014
CV-RENAL			
OBSERVED	521.0	993.0	1411.0
EXPECTED*	584.4	1220.4	1542.8
OBS/EXP	0.892	0.814	0.915
HEART			
OBSERVED	342.0	703.0	944.0
EXPECTED*	414.1	856.9	1074.6
OBS/EXP	0.826	0.820	0.878
NON CV-R			
OBSERVED	377.0	723.0	1165.0
EXPECTED*	416.2	788.1	998.8
OBS/EXP	0.906	0.917	1.166
CANCER			
OBSERVED	148.0	281.0	461.0
EXPECTED*	159.3	314.3	385.7
OBS/EXP	0.929	0.894	1.195

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS										CODE
	1989	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	OREGON				
CAUSE												1950 RANK BY POPULATION	276				
TOTAL	433	465	898	600	571	545	1716	790	847	939	2576	1950 PCP/SQ. MILE	5393				
CY-RENAL	245	276	521	331	340	322	993	439	465	507	1411	1970 PCP/SQ. MILE	2776				
HEART	156	186	342	246	234	223	703	297	297	352	941	1949 FED. FAM. INCOME	3633				
NON CV-R	188	189	377	269	231	223	783	351	382	432	1165	1969 FED. FAM. INCOME	9582				
CANCER	76	72	148	102	90	89	281	106	161	194	461	URBAN CLASS	INDEPENDENT				
												1950 URBAN AREA RANK	-				
												JAN MEAN TEMPERATURE	38				
												JULY MEAN TEMPERATURE	67				
												MEAN ANN. PRECIPITATION	39				
												LAND RESOURCE REGION	A				
												WATER SOURCE	GROUND AND SURFACE				
												TOTAL HARDNESS	17 PPM				
												NON-CARBONATE HARDNESS	0 PPM				
												FLUORIDATION STATUS	FLUORIDATED IN 1965				

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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	NP	NM	NP
TOTAL	215	199	52	49
1-4	848	766	268	204
5-9	820	741	208	240
10-14	800	801	178	177
15-19	821	843	133	163
20-24	1094	1126	158	170
25-29	1030	1035	160	211
30-34	970	884	153	163
35-39	769	792	171	182
40-44	636	651	177	151
45-49	616	609	181	426
50-54	739	514	138	92
55-59	785	571	85	45
60-64	665	388	52	32
65-69	405	264	37	39
70-74	197	124	16	9
75-79	103	119	8	11
80-84	0	0	0	0
85-UP	18	13	6	6
TOTALS	11521	10420	2121	2670
GRAND TOTAL				26132

1960	MF	NM	NF	NP
220	215	84	77	
325	325	313	304	
361	333	341	361	
446	380	309	316	
558	598	211	242	
616	718	139	188	
716	646	164	170	
822	762	152	166	
927	875	166	233	
1027	917	172	167	
1126	969	195	150	
1247	553	141	132	
1332	503	140	105	
1423	423	103	80	
1522	421	67	56	
1622	290	30	24	
1716	151	21	10	
1811	62	5	7	
1926	30	0	4	
2031	10321	2753	2792	
21369			26369	

1970	NP	NP
54	58	
208	218	
269	289	
349	282	
256	283	
153	184	
114	162	
100	138	
105	138	
130	153	
137	167	
135	124	
125	126	
107	99	
78	82	
57	54	
22	32	
15	12	
9	8	
2423	2609	
	22277	

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	470.0	844.0	820.0
EXPECTED*	380.1	726.2	802.9
OBS/EXP	1.236	1.162	1.021
CV-RENAL			
OBSERVED	242.0	460.0	451.0
EXPECTED*	185.6	376.3	455.2
OBS/EXP	1.304	1.222	0.982
HEART			
OBSERVED	162.0	296.0	330.0
EXPECTED*	136.4	270.8	321.9
OBS/EXP	1.187	1.093	1.025
NON CV-R			
OBSERVED	228.0	384.0	369.0
EXPECTED*	194.5	349.9	343.8
OBS/EXP	1.172	1.097	1.073
CANCER			
OBSERVED	68.0	169.0	142.0
EXPECTED*	63.3	118.2	128.2
OBS/EXP	1.074	1.430	1.108

* * SEP INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS BY CAUSE AND YEAR								CITY CHARACTERISTICS				CODE	
49-50 SUM		1950	1959	1960	1961	59-61 SUM		1969	1970	1971	69-71 SUM	STATE	PENNSYLVANIA
CAUSE		1949										RANK BY POPULATION	
TOTAL	260	210	276	274	294	844	287	266	267	820	1950 POP./SQ. MILE	463	5339
CV-BEHAL	142	100	145	154	161	460	146	141	141	428	1970 POP./SQ. MILE	5304	5304
HEART	97	65	90	106	106	296	122	104	104	330	1949 MED. FAM. INCOME	3453	3453
NON CV-R	118	110	131	120	133	384	123	120	126	369	1969 MED. FAM. INCOME	8545	8545
CANCER	40	28	57	54	58	169	50	49	43	142	URBAN CLASS	PRINCE	8
											1950 URBAN AREA RANK		29
											JAN MEAN TEMPERATURE		73
											JULY MEAN TEMPERATURE		37
											MEAN ANN. PRECIPITATION		N
											LAND RESOURCE REGION		
											WATER SOURCE		GROUND
											TOTAL HARDNESS		118 PPM
											NON-CARBONATE HARDNESS		14 PPM
											FLUORIDATION STATUS		NO ARTIFICIAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	588	542	6	1	749	655	19	11	495	484	25	24
1-4	2486	2419	26	39	3092	2998	71	72	1883	1870	76	59
5-9	2677	2590	29	33	3435	3418	55	61	2898	2742	108	96
10-14	2010	1926	23	28	3211	3147	47	45	3262	3133	105	96
15-19	2613	2579	27	30	3379	2411	39	36	4279	3023	95	72
20-24	2613	2579	27	30	3379	2411	39	36	4279	3023	95	72
25-29	2805	3049	29	32	2612	1851	49	51	3508	2704	100	71
30-34	2792	2990	28	32	2014	2215	46	48	2053	2020	75	65
35-39	2555	2540	28	31	2590	2731	57	45	1514	1539	44	54
40-44	2100	2138	26	22	2748	3040	41	41	1600	1837	46	53
45-49	1891	1889	35	29	2704	2912	26	32	2122	2400	44	47
50-54	1819	1984	31	16	2430	2436	35	30	2359	2796	33	33
55-59	1726	1829	8	12	1942	1991	23	24	2386	2664	29	31
60-64	1652	1455	22	10	1634	1727	25	23	2062	2184	22	33
65-69	1021	1095	7	4	1439	1609	21	17	1535	1767	20	21
70-74	620	686	9	6	1286	1630	14	11	1102	1440	22	22
75-79*	539	725	1	2	1036	1119	9	5	864	1367	13	12
80-84*	0	0	0	0	560	730	3	3	643	1051	8	7
85-UP	79	113	1	2	227	320	4	2	372	547	8	7
TOTALS	33073	32527	379	361	37112	37163	585	548	35108	35905	871	802
GRAND TOTAL				66340				75408				72686

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	1276.0	2233.0	2252.0
EXPECTED*	1083.8	2041.7	2376.3
OBS/EXP	1.177	1.094	0.950
CV-RENAL			
OBSERVED	715.0	1254.0	1338.0
EXPECTED*	583.5	1124.2	1383.6
OBS/EXP	1.225	1.115	0.967
HEART			
OBSERVED	519.0	933.0	1037.0
EXPECTED*	424.0	810.6	979.4
OBS/EXP	1.224	1.151	1.059
NON CV-R			
OBSERVED	561.0	979.0	914.0
EXPECTED*	500.3	977.6	986.7
OBS/EXP	1.121	1.067	0.926
CANCER			
OBSERVED	197.0	392.0	406.0
EXPECTED*	183.8	340.0	391.9
OBS/EXP	1.072	1.153	1.063

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	588	628	757	764	712	742	756	754
CV-RENAL	363	352	432	443	403	452	463	463
HEART	285	252	328	302	303	334	366	337
NON CV-R	285	272	325	345	309	299	304	311
CANCER	100	97	136	133	123	141	139	126
STATE								
1950 RANK BY POPULATION								
1950 POP/SQ. MILE								
1970 POP/SQ. MILE								
1949 MED. FAM. INCOME								
1969 MED. FAM. INCOME								
URBAN CLASS								
1950 URBAN AREA RANK								
JAN MEAN TEMPERATURE								
JULY MEAN TEMPERATURE								
MEAN ANN. PRECIPITATION								
LAND RESOURCE REGION								
WATER SOURCE								
TOTAL HARDNESS								
NON-CARBONATE HARDNESS								
FLUORIDATION STATUS								
NO ARTIFICIAL, LOW NATURAL								

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	NM	NP
LT 1	309	301	10	14
1-4	1227	1245	32	40
5-9	1075	1119	33	36
10-14	958	954	44	34
15-19	1351	1057	32	21
20-24	1984	1431	38	35
25-29	1512	1504	33	40
30-34	1310	1410	36	45
35-39	1209	1295	32	31
40-44	1022	1146	27	24
45-49	946	1027	32	22
50-54	1022	1053	22	22
55-59	931	1031	14	14
60-64	897	932	15	10
65-69	619	771	6	5
70-74	431	568	5	3
75-79*	407	597	6	3
80-84*	0	0	0	0
85-UP	65	100	1	2
TOTALS	17275	17541	418	398
GRAND TOTAL				35632

1960	NP	MM	WM	WM	WM
267	278	25	23		
1037	1069	83	80		
1181	1191	65	62		
1163	1229	61	67		
1514	909	32	45		
1298	829	46	49		
814	790	35	40		
915	940	42	55		
943	1010	36	46		
931	1093	33	44		
910	1031	33	38		
824	966	21	23		
810	892	35	27		
911	911	15	19		
852	867	13	22		
681	681	7	7		
539	498	5	3		
314	498	2	3		
175	252	2	3		
74	156	1	2		
15113	15577	590	675		
			31955		

1970	WM	MF	WM	MF
	208	196	21	26
	837	819	141	97
	1158	1044	144	124
	1143	1110	115	117
	1815	1062	99	102
	1640	1067	78	100
	773	794	51	69
	597	646	47	56
	606	619	56	54
	727	835	56	59
	810	925	52	59
	789	938	29	49
	736	890	19	44
	658	816	18	20
	513	701	24	31
	436	708	8	11
	297	530	7	14
	188	355	2	3
	79	191	1	2
			968	
	10246			10326
				30256

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	1003.0	1441.0	1297.0
EXPECTED*	718.0	1154.3	1148.0
OBS/EXP	1.397	1.248	1.130
CV-RENAL			
OBSERVED	608.0	886.0	719.0
EXPECTED*	405.4	674.1	688.0
OBS/EXP	1.500	1.314	1.045
HEART			
OBSERVED	441.0	672.0	553.0
EXPECTED*	289.8	477.0	480.1
OBS/EXP	1.522	1.409	1.152
NON CV-R			
OBSERVED	395.0	555.0	578.0
EXPECTED*	312.6	480.3	460.1
OBS/EXP	1.264	1.156	1.256
CANCER			
OBSERVED	154.0	209.0	260.0
EXPECTED*	117.4	184.5	176.8
OBS/EXP	1.312	1.133	1.470

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	NP	MM	NP
LT 1	1304	1311	53	43
1-4	5365	5038	169	177
5-9	5130	5054	146	145
10-14	4050	4088	153	121
15-19	3753	4110	100	132
20-24	4599	5388	154	194
25-29	5202	5691	157	190
30-34	5366	5412	135	130
35-39	4813	4893	155	118
40-44	4604	4277	148	116
45-49	3614	3798	124	90
50-54	3553	3749	97	78
55-59	3484	3415	71	30
60-64	2938	2919	33	28
65-69	2136	2361	40	27
70-74	1295	1686	12	14
75-79*	1247	1662	12	11
80-84*	0	0	0	0
85-up	163	288	2	2
TOTALS	62026	65340	1791	1646
GRAND TOTAL				130603

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-70
TOTAL			
OBSERVED	2791.0	4772.0	4583.0
EXPECTED*	2312.7	4096.1	4302.3
OBS/EXP	1.207	1.165	1.065
ICV-RENAL			
OBSERVED	1512.0	2694.0	2582.0
EXPECTED*	1256.2	2282.0	2502.8
OBS/EXP	1.202	1.181	1.032
HEART			
OBSERVED	1088.0	1920.0	1938.0
EXPECTED*	906.8	1626.1	1755.5
OBS/EXP	1.200	1.181	1.104
NON CV-R			
OBSERVED	1279.0	2078.0	2001.0
EXPECTED*	1054.5	1814.1	1799.5
OBS/EXP	1.213	1.145	1.112
CANCER			
OBSERVED	474.0	822.0	811.0
EXPECTED*	381.4	654.8	667.1
OBS/EXP	1.243	1.255	1.216

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
Y CAUSE AND YEAR

CAUSE	1949	1950	49-50	1959	1960	1961	59-61	1969	1970	1971	SUM	59-71
			SUM				SUM					SUM
TOTAL	1386	1405	2791	1564	1643	1565	4772	1546	1551	1486	4583	69-71
CV-FENAL	762	750	1512	891	932	891	2614	828	862	872	2582	69-71
HEART	559	529	1088	644	633	643	1920	612	664	664	1938	69-71
NON CV-R	624	655	1279	674	751	701	2026	718	669	614	2001	69-71
CANCER	221	253	474	262	296	264	822	272	272	265	811	69-71

CITY CHARACTERISTICS

STATE	PENNSYLVANIA
1950 RANK BY POPULATION	74
1950 POP./SQ. MILE	6958
1970 POP./SQ. MILE	6838
1949 MED. P.M. INCOME	3542
1969 MED. P.M. INCOME	897
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	81
JAN. MEAN TEMPERATURE	25
JULY MEAN TEMPERATURE	74
MEAN ANN. PRECIPITATION	32
LAND AND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	129 PPM
NON-CARBONATE HARDNESS	40 PPM
POPULATION STATUS	NO ARTIFICIAL LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT 1	660	628	109	106
1-4	2824	2672	430	430
5-9	2454	2424	480	463
10-14	1947	2018	355	419
15-19	1989	2408	343	363
20-24	2526	3438	343	453
25-29	3032	3532	426	538
30-34	3032	3426	386	456
35-39	2828	3188	359	437
40-44	2706	3140	323	390
45-49	2459	2791	336	314
50-54	2504	2749	311	256
55-59	2201	2513	217	184
60-64	1978	2360	148	134
65-69	1593	1981	125	120
70-74	1097	1408	70	67
75-79	928	1395	53	54
80-84	0	0	0	0
85-UP	107	229	5	11
TOTALS	37089	42300	4919	5236
GRAND TOTAL				89544

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	2429.0	3795.0	3333.0
EXPECTED*	1844.5	3011.0	2501.1
OBS/EXP	1.317	1.260	1.149
CV-RENAL			
OBSERVED	1429.0	2142.0	1822.0
EXPECTED*	1027.9	1726.4	1711.4
OBS/EXP	1.390	1.241	1.065
HEART			
OBSERVED	1111.0	1591.0	1382.0
EXPECTED*	731.5	1208.4	1172.4
OBS/EXP	1.519	1.317	1.179
NON CV-R			
OBSERVED	1000.0	1653.0	1511.0
EXPECTED*	816.6	1284.6	1189.7
OBS/EXP	1.225	1.287	1.270
CANCER			
OBSERVED	359.0	622.0	572.0
EXPECTED*	304.0	471.5	429.6
OBS/EXP	1.181	1.319	1.332

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	1199	1230	2429	1282	1277	1236	3795	1171	1104	1058	3333
CW-REVAL	711	718	1429	717	710	715	2142	658	596	568	1822
HEART	559	552	1111	532	541	518	1591	511	449	422	1382
NON CW-R	488	512	1000	565	567	521	1653	513	508	490	1511
CANCER	166	193	359	206	201	206	613	191	195	186	572

CITY CHARACTERISTICS

CODE

STATE	PENNSYLVANIA
1950 BANK BY POPULATION	126
1950 POP./SQ. MILE	14213
1970 POP./SQ. MILE	8215
1949 MED. FAM. INCOME	3303
1969 MED. FAM. INCOME	8176
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	73
JAN MEAN TEMPERATURE	31
JULY MEAN TEMPERATURE	75
MEAN ANNUAL PRECIPITATION	36
LAND RESOURCE REGION	SURFACE
WATER SOURCE	13 PPM
TOTAL HARDNESS	13 PPM
NON-CARBONATE HARDNESS	NO ARTIFICIAL
FLUORIDATION STATUS	NO ARTIFICIAL

NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	284	268	0	0	264	266	0	0	191	181	0	1
1-4	1233	1242	1	0	1117	1658	0	0	790	809	2	0
5-9	1353	1237	0	0	1330	1301	0	0	1188	1095	4	1
10-14	1187	1196	4	0	1345	1275	0	0	1324	1243	0	4
15-19	1179	1327	0	0	986	1127	0	0	1157	1250	2	0
20-24	1143	1486	3	3	666	813	0	0	799	985	0	1
25-29	1315	1588	1	1	730	847	2	1	744	787	0	4
30-34	1322	1582	1	1	918	1076	2	0	704	731	2	2
35-39	1359	1542	0	1	1030	1276	1	0	686	759	0	2
40-44	1298	1453	0	1	1076	1361	1	0	837	1021	1	1
45-49	1114	1288	1	0	1139	1319	0	1	927	1195	0	4
50-54	1087	1142	0	0	1042	1209	0	0	979	1268	0	0
55-59	927	925	1	0	932	1129	0	0	979	1240	0	0
60-64	788	762	0	0	821	974	0	0	913	1206	1	1
65-69	560	653	0	0	677	797	0	0	646	921	0	0
70-74	380	416	0	0	488	583	0	0	520	779	2	2
75-79*	315	397	1	0	245	347	0	0	304	500	1	0
80-84*	0	0	0	0	126	196	0	0	164	301	0	0
85-89*	51	72	0	0	52	110	0	0	85	178	0	2
TOTALS	16895	18576	13	7	14984	17064	6	2	13937	16449	15	25
GRAND TOTAL			35491				32056				30426	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	757.0	1245.0	1276.0
EXPECTED*	599.8	1014.5	1192.6
OBS/EXP	1.262	1.227	1.070
CV-RENAL			
OBSERVED	383.0	705.0	743.0
EXPECTED*	328.8	577.4	715.3
OBS/EXP	1.165	1.221	1.039
HEART			
OBSERVED	275.0	512.0	566.0
EXPECTED*	238.4	416.7	507.5
OBS/EXP	1.153	1.229	1.115
NON CV-F			
OBSERVED	374.0	540.0	533.0
EXPECTED*	271.1	432.1	477.3
OBS/EXP	1.380	1.235	1.117
CANCER			
OBSERVED	128.0	206.0	184.0
EXPECTED*	102.5	174.3	197.8
OBS/EXP	1.249	1.182	0.930

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970				1971				1971				1971			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	366	391	757		407	434	1245		416	422	1276		422	422	1276		422	416	1276		422	416	1276	
CV-RENAL	173	210	383		221	262	705		258	240	743		258	240	743		258	240	743		258	240	743	
HEART	125	150	275		169	191	512		169	175	566		175	175	566		175	169	566		175	169	566	
NON CV-R	193	181	374		185	172	540		180	176	533		177	177	533		177	180	533		177	180	533	
CANCER	76	52	128		64	71	206		59	60	184		65	60	184		65	59	184		65	59	184	

CITY CHARACTERISTICS

STATE	CODE
PENNSYLVANIA	
1950 RANK BY POPULATION	342
1950 POP/SQ. MILE	5915
1970 POP/SQ. MILE	5157
1949 MED. FAM. INCOME	3105
1969 MED. FAM. INCOME	8359
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	24
JULY MEAN TEMPERATURE	69
MEAN ANN. PRECIPITATION	47
LAND RESOURCE REGION	S
WATER SOURCE	SURFACE
TOTAL HARDNESS	5 PPM
NON-CARBONATE HARDNESS	1 PPM
FLUORIDATION STATUS	NO ARTIFICIAL ION NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	MF	NH	MF	NH
14-17	614	24	25	
18-24	2,94	109	164	
25-29	5,23	130	174	
30-34	4,16	112	82	
35-39	2,012	236	79	
40-44	2,236	269	88	
45-49	2,556	280	83	
50-54	2,473	253	96	
55-59	2,223	236	89	
60-64	1,909	202	78	
65-69	1,626	182	61	
70-74	1,595	169	43	
75-79	1,625	161	27	
80-84	1,512	133	25	
85-89	1,091	113	17	
90-94	678	75	11	
95-99	603	69	6	
TOTAL	29,889	3,125	1,126	10,921
GRAND TOTAL				6,323

AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM
TOTAL	898	859	1757	832	901	835	2568
NON-CANCER	461	473	934	445	535	539	1519
CANCER	437	386	823	387	366	363	1057
HEART	316	342	658	338	366	363	1027
NON-CANCER	447	386	833	337	366	362	1029
CANCER	134	121	255	130	118	132	380

CITY CHARACTERISTICS

[illegible]

LANCASTER
-380-

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	525	550	22	30	606	594	55	49	434	375	81	70
1-4	2215	2117	79	72	2302	2264	141	195	1598	1597	224	243
5-9	2019	2050	81	73	2417	2286	155	175	2284	2189	330	305
10-14	1727	1702	75	74	2209	2187	117	136	2265	2186	271	324
15-19	2033	2080	62	80	2078	2198	94	90	2691	2288	243	252
20-24	2635	2691	75	76	2000	2078	90	81	2620	2437	212	216
25-29	2600	2800	80	85	1801	1788	81	108	1587	1658	127	157
30-34	2271	2496	56	76	1825	1852	79	79	1234	1281	132	118
35-39	2120	2243	66	64	1775	1953	96	109	1213	1264	96	143
40-44	2076	2276	61	68	1713	1879	65	82	1364	1503	99	95
45-49	1914	2077	60	57	1604	1813	58	58	1365	1670	86	103
50-54	1738	1946	64	44	1545	1827	67	41	1359	1630	63	91
55-59	1578	1835	34	34	1527	1806	50	61	1252	1564	65	57
60-64	1300	1699	31	29	1317	1666	40	29	1197	1593	48	51
65-69	1148	1420	17	30	1154	1544	24	29	1020	1529	40	51
70-74	798	1039	13	16	778	1360	27	25	792	1277	35	23
75-79*	787	1142	14	15	571	871	8	15	523	953	10	27
80-84*	0	140	0	0	261	493	4	8	252	635	8	16
85-UP	118	186	3	3	137	306	5	2	160	326	8	5
TOTALS	29602	32349	903	920	27620	30807	1256	1372	25210	27955	2178	2347
GRAND TOTAL				63774				61055				57690

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*
CV-RENAL									
		920.0	1254.0		1616.0				
		749.1	1236.4		1216.5				
		1.228	1.328		1.228				
HEART									
		647.0	1148.0		887.0				
		532.8	858.7		865.4				
		1.214	1.337		1.214				
NON CV-R									
		713.0	1048.0		989.0				
		567.4	889.1		854.8				
		1.257	1.179		1.257				
CANCER									
		257.0	387.0		388.0				
		214.3	322.9		333.1				
		1.199	1.162		1.199				

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM	49-50	1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	831	802	1633		896	893	875	2664	751	749	743	2243
CV-RENAL	477	443	920		540	530	546	1616	437	400	417	1254
HEART	329	318	647		361	382	405	1148	281	281	307	869
NON CV-R	354	359	713		356	363	329	1048	314	349	326	989
CANCER	132	125	257		124	126	137	387	125	141	122	388

CITY CHARACTERISTICS

STATE	PENNSYLVANIA	
	1950	1960
1950 POP/50. MILE	16831	16831
1970 POP/50. MILE	8013	8013
1949 MED. FAM. INCOME	3502	3502
1969 MED. FAM. INCOME	8635	8635
URBAN CLASS	CENTRAL	CENTRAL
1950 URBAN AREA RANK	146	146
JAN MEAN TEMPERATURE	30	30
JULY MEAN TEMPERATURE	74	74
MEAN ANN. PRECIPITATION	41	41
LAND RESOURCE REGION	S	S
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	177 PPM	177 PPM
NON-CARBONATE HARDNESS	62 PPM	62 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1960	FLUORIDATED IN 1960

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	1950		1950		1960		1960		1970		1970	
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	273	222	1	1	308	291	2	1	236	208	2	3
1-4	1056	1129	6	7	1238	1168	8	10	910	877	7	8
5-9	1122	1122	3	9	1398	1321	7	3	1329	1246	11	10
10-14	967	965	2	1	1310	1263	7	10	1305	1213	10	14
15-19	895	969	2	3	1033	1131	7	6	1198	1183	8	1
20-24	1001	1125	7	4	763	853	1	5	979	1064	5	13
25-29	1076	1191	4	8	868	853	4	3	867	866	9	7
30-34	1064	1133	5	4	962	960	2	5	666	694	5	7
35-39	1013	1074	4	5	914	1075	4	8	748	716	5	5
40-44	912	986	3	3	970	1061	4	7	774	859	5	4
45-49	800	886	4	5	947	1052	9	7	758	956	2	4
50-54	772	822	6	2	838	939	4	5	838	983	4	7
55-59	665	798	2	3	734	884	8	3	845	979	8	10
60-64	644	677	1	1	629	720	6	5	673	911	3	3
65-69	462	614	2	3	515	728	0	3	505	743	4	3
70-74	334	461	2	1	428	556	4	1	358	590	2	2
75-79*	329	460	1	0	253	385	2	0	252	446	4	2
80-84*	0	0	0	0	112	231	0	1	142	245	3	2
85-UP	50	63	1	0	57	124	0	1	59	149	0	0
TOTALS	13429	14609	59	59	14247	15635	79	84	13442	14928	97	105
GRAND TOTAL			28156				30045				28572	

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND DEATH PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP
TOTAL	752.0	1196.0	970.0	970.0	970.0	970.0
CV-RENAL	437.0	736.0	561.0	561.0	561.0	561.0
HEART	317.0	545.0	438.0	438.0	438.0	438.0
NON CV-R	315.0	460.0	409.0	409.0	409.0	409.0
CANCER	103.0	208.0	179.0	179.0	179.0	179.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	PENNSYLVANIA	435	7821
1950 POP/SQ. MILE	1970 POP/SQ. MILE	6211	3317
1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	8889	INDEPENDENT
URBAN CLASS	1950 URBAN AREA RANK	-	29
JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	74	43
MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	S	22 PPM
WATER SOURCE	TOTAL HARDNESS	14 PPM	NO ARTIFICIAL, LOW NATURAL
NON-CARBONATE HARDNESS	FLUORIDATION STATUS		

CAUSE	1949-50	1959-61	1969-71
1. <i>Chlamydia trachomatis</i>	100	100	100
2. <i>Neisseria gonorrhoeae</i>	100	100	100
3. <i>Haemophilus ducreyi</i>	100	100	100
4. <i>Herpes simplex virus</i>	100	100	100
5. <i>Mycoplasma genitalium</i>	100	100	100
6. <i>Ureaplasma urealyticum</i>	100	100	100
7. <i>Trichomonas vaginalis</i>	100	100	100
8. <i>Candida albicans</i>	100	100	100
9. <i>Streptococcus pyogenes</i>	100	100	100
10. <i>Staphylococcus aureus</i>	100	100	100
11. <i>Escherichia coli</i>	100	100	100
12. <i>Pseudomonas aeruginosa</i>	100	100	100
13. <i>Klebsiella pneumoniae</i>	100	100	100
14. <i>Acinetobacter baumannii</i>	100	100	100
15. <i>Mycobacterium tuberculosis</i>	100	100	100
16. <i>Coccidioides immitis</i>	100	100	100
17. <i>Histoplasma capsulatum</i>	100	100	100
18. <i>Blastomyces dermatitidis</i>	100	100	100
19. <i>Cryptosporidium parvum</i>	100	100	100
20. <i>Isospora belli</i>	100	100	100
21. <i>Cyclospora cayentensis</i>	100	100	100
22. <i>Microsporidium</i>	100	100	100
23. <i>Toxoplasma gondii</i>	100	100	100
24. <i>Trypanosoma brucei</i>	100	100	100
25. <i>Leishmania</i>	100	100	100
26. <i>Plasmodium</i>	100	100	100
27. <i>Malaria</i>	100	100	100
28. <i>Dysentery</i>	100	100	100
29. <i>Shigellosis</i>	100	100	100
30. <i>Salmonella</i>	100	100	100
31. <i>Yersinia enterocolitica</i>	100	100	100
32. <i>Yersinia pseudotuberculosis</i>	100	100	100
33. <i>Yersinia enterocolitica</i>	100	100	100
34. <i>Yersinia pseudotuberculosis</i>	100	100	100
35. <i>Yersinia enterocolitica</i>	100	100	100
36. <i>Yersinia pseudotuberculosis</i>	100	100	100
37. <i>Yersinia enterocolitica</i>	100	100	100
38. <i>Yersinia pseudotuberculosis</i>	100	100	100
39. <i>Yersinia enterocolitica</i>	100	100	100
40. <i>Yersinia pseudotuberculosis</i>	100	100	100
41. <i>Yersinia enterocolitica</i>	100	100	100
42. <i>Yersinia pseudotuberculosis</i>	100	100	100
43. <i>Yersinia enterocolitica</i>	100	100	100
44. <i>Yersinia pseudotuberculosis</i>	100	100	100
45. <i>Yersinia enterocolitica</i>	100	100	100
46. <i>Yersinia pseudotuberculosis</i>	100	100	100
47. <i>Yersinia enterocolitica</i>	100	100	100
48. <i>Yersinia pseudotuberculosis</i>	100	100	100
49. <i>Yersinia enterocolitica</i>	100	100	100
50. <i>Yersinia pseudotuberculosis</i>	100	100	100
51. <i>Yersinia enterocolitica</i>	100	100	100
52. <i>Yersinia pseudotuberculosis</i>	100	100	100
53. <i>Yersinia enterocolitica</i>	100	100	100
54. <i>Yersinia pseudotuberculosis</i>	100	100	100
55. <i>Yersinia enterocolitica</i>	100	100	100
56. <i>Yersinia pseudotuberculosis</i>	100	100	100
57. <i>Yersinia enterocolitica</i>	100	100	100
58. <i>Yersinia pseudotuberculosis</i>	100	100	100
59. <i>Yersinia enterocolitica</i>	100	100	100
60. <i>Yersinia pseudotuberculosis</i>	100	100	100
61. <i>Yersinia enterocolitica</i>	100	100	100
62. <i>Yersinia pseudotuberculosis</i>	100	100	100
63. <i>Yersinia enterocolitica</i>	100	100	100
64. <i>Yersinia pseudotuberculosis</i>	100	100	100
65. <i>Yersinia enterocolitica</i>	100	100	100
66. <i>Yersinia pseudotuberculosis</i>	100	100	100
67. <i>Yersinia enterocolitica</i>	100	100	100
68. <i>Yersinia pseudotuberculosis</i>	100	100	100
69. <i>Yersinia enterocolitica</i>	100	100	100
70. <i>Yersinia pseudotuberculosis</i>	100	100	100
71. <i>Yersinia enterocolitica</i>	100	100	100
72. <i>Yersinia pseudotuberculosis</i>	100	100	100
73. <i>Yersinia enterocolitica</i>	100	100	100
74. <i>Yersinia pseudotuberculosis</i>	100	100	100
75. <i></i>			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	431	455	18	13	436	422	30	25	308	269	30	31
1-4	1846	1751	93	68	1761	1623	129	141	1083	1080	120	111
5-9	1805	1780	107	100	1989	1927	151	131	1496	1390	146	152
10-14	1515	1504	91	81	1816	1771	113	104	1714	1578	148	172
15-19	1422	1638	62	67	1377	1539	103	96	1538	1737	138	111
20-24	1728	2036	65	84	1061	1302	59	74	1141	1421	48	78
25-29	2020	2236	76	84	1189	1193	69	67	986	1052	56	78
30-34	1807	2071	51	63	1241	1364	79	87	732	841	49	58
35-39	1688	1841	62	69	1380	1606	75	91	796	903	57	61
40-44	1412	1499	60	46	1298	1610	55	56	985	1064	54	79
45-49	1233	1331	63	68	1332	1517	56	71	1104	1323	59	77
50-54	1235	1330	66	50	1089	1220	58	48	1109	1352	43	61
55-59	1293	1277	47	39	928	1088	55	60	1024	1250	48	55
60-64	1154	1110	41	34	923	1062	51	43	793	1006	39	42
65-69	904	934	24	23	940	1032	43	35	653	874	39	52
70-74	658	656	16	19	758	810	26	29	531	825	24	23
75-79*	530	635	15	7	474	569	14	8	460	661	16	17
80-84*	0	0	0	0	236	314	4	7	242	357	9	11
85-UP	79	112	3	3	112	189	9	8	164	270	7	8
TOTALS	22760	24196	960	918	20339	22098	1179	1174	16899	19253	1130	1277
GRAND TOTAL				48834				44790				38559

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1141.0	1778.0	1659.0	932.1	1550.6	1527.0	932.1	1550.6	1527.0
	1.224	1.147	1.086						
CV-RENAL									
OBSERVED	605.0	1075.0	987.0						
EXPECTED*	518.5	897.7	919.5						
OBS/EXP	1.167	1.198	1.073						
HEART									
OBSERVED	391.0	728.0	721.0						
EXPECTED*	372.2	634.4	639.8						
OBS/EXP	1.050	1.148	1.127						
NON CV-R									
OBSERVED	536.0	703.0	672.0						
EXPECTED*	413.6	652.9	607.5						
OBS/EXP	1.296	1.077	1.106						
CANCER									
OBSERVED	155.0	296.0	280.0						
EXPECTED*	153.2	245.4	233.0						
OBS/EXP	1.011	1.206	1.202						

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUN	SUN	1959	1960	1961	SUN	1969	1970	1971	SUN
TOTAL	564	577	1141	1178	595	594	589	1778	544	587	528	1659
CV-RENAL	313	292	605	349	375	340	360	1075	325	343	317	987
HEART	203	188	351	248	248	225	255	728	235	255	231	721
NON CV-R	251	285	236	220	220	254	229	703	219	238	215	672
CANCER	64	91	155	296	86	111	99	296	79	108	93	280

CITY CHARACTERISTICS

CODE

STATE	PENNSYLVANIA
1950 RANK BY POPULATION	239
1950 POP/SQ. MILE	6261
1970 POP/SQ. MILE	5008
1949 MED. FAM. INCOME	3280
1969 MED. FAM. INCOME	7949
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	28
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	37
LAND RESOURCE REGION	R
WATER SOURCE	SURFACE
TOTAL HARDNESS	112 PPM
NON-CARBONATE HARDNESS	76 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1953

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	HF	NM	NP	WM	HF	NM	NP	WM	HF	NM	NP
LT 1	245	228	14	15	218	215	13	23	113	118	8	6
1-4	972	960	65	57	795	808	84	88	525	445	39	42
5-9	962	952	49	41	949	979	95	73	783	743	57	56
10-14	822	765	40	64	930	922	94	79	864	855	62	56
15-19	668	756	34	37	771	771	54	65	833	833	56	67
20-24	869	1100	40	52	478	647	24	39	516	707	21	46
25-29	1017	1154	47	47	506	606	38	45	509	514	26	29
30-34	1073	1165	40	39	625	732	37	62	453	468	18	24
35-39	984	1039	39	39	748	875	47	50	416	471	28	27
40-44	819	852	41	49	816	970	48	45	538	643	22	36
45-49	722	681	59	48	873	873	30	42	667	806	19	33
50-54	650	640	38	36	695	724	45	49	673	906	22	27
55-59	688	620	33	55	564	557	36	28	666	785	26	16
60-64	484	474	13	11	510	542	22	25	554	583	16	18
65-69	368	363	10	10	489	487	24	30	487	461	18	24
70-74	241	225	9	10	325	355	11	14	378	384	12	16
75-79*	201	226	9	10	191	199	7	7	191	209	7	7
80-84*	0	0	0	0	108	110	1	1	119	184	1	3
85-89	23	42	0	2	47	46	1	2	57	75	2	9
TOTALS	11748	12237	580	581	10578	11418	711	778	9035	10264	460	553
GRAND TOTAL				25146				23485				20312

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	512.0	742.0	712.0
EXPECTED*	399.1	709.2	743.5
OBS/EXP	1.283	1.046	0.958
CV-CV-RNAL			
OBSERVED	253.0	458.0	377.0
EXPECTED*	210.0	393.5	436.1
OBS/EXP	1.205	1.164	0.859
HEART			
OBSERVED	187.0	344.0	263.0
EXPECTED*	152.2	283.0	311.7
OBS/EXP	1.228	1.215	0.844
NON CV-R			
OBSERVED	259.0	284.0	335.0
EXPECTED*	189.1	315.7	304.5
OBS/EXP	1.370	0.900	1.100
CANCER			
OBSERVED	84.0	114.0	159.0
EXPECTED*	66.4	118.0	123.0
OBS/EXP	1.266	0.966	1.293

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50			1959-61		
	1949	1950	SUM	1959	1960	SUM
TOTAL	255	257	512	263	237	500
CV-PENAL	122	131	253	155	147	302
REPT	87	100	187	120	111	231
NON CV-R	133	126	259	108	95	203
CANCER	40	44	84	42	32	74

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 POP./SQ. MILE	1949 MED. F.A.M. INCOME	1969 MED. F.A.M. INCOME	URBAN CLASS.	1950 URBAN AREA	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANNUAL PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS	PLUVEDIATION STATUS
PENNSYLVANIA	478	6617	5208	3182	8613	PRINCE	29	29	36	N	SURFACE	219 PPM	206 PPM	FLUORIDATED	PLUVEDIATED	I

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970						TOTAL	CAUSE
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF		
LT 1	276	247	33	36	346	339	74	62	334	309	77	91	1183	1139	334	313	1545.0	1573.0	1545.0	1573.0
1-4	1236	1162	130	132	1252	1237	223	256	1236	1237	223	256	1423	1376	443	444	835.5	845.7	835.5	845.7
5-9	1240	1123	154	142	1249	1224	226	243	1249	1224	226	243	1344	1296	372	384	1.051	1.047	1.051	1.047
10-14	967	999	138	137	1124	1166	202	205	1124	1166	202	205	1133	1174	278	301	485.0	911.0	485.0	911.0
15-19	956	1138	132	119	998	1087	167	183	998	1087	167	183	1385	1662	214	279	479.8	856.1	479.8	856.1
20-24	1202	1410	106	138	1202	1410	921	1077	1202	1410	921	1077	1285	1241	236	259	1.011	1.064	1.011	1.064
25-29	1419	1528	133	113	1419	1528	113	113	1419	1528	113	113	1419	1528	113	113	361.0	567.0	361.0	567.0
30-34	1333	1345	112	127	1333	1345	112	127	1333	1345	112	127	1333	1345	112	127	339.1	596.8	339.1	596.8
35-39	1133	1258	99	116	1133	1258	99	116	1133	1258	99	116	1133	1258	99	116	1.065	1.114	1.065	1.114
40-44	1131	1258	123	124	1090	1148	127	160	1090	1148	127	160	827	842	157	187	393.0	634.0	393.0	634.0
45-49	1030	1202	123	104	1026	1192	153	133	1026	1192	153	133	856	967	156	170	352.7	619.5	352.7	619.5
50-54	1030	1202	123	104	1026	1192	153	133	1026	1192	153	133	856	967	156	170	1.105	1.023	1.105	1.023
55-59	931	1127	52	52	911	1156	139	114	911	1156	139	114	732	909	116	125	128.0	204.0	128.0	204.0
60-64	881	1014	34	49	823	1057	82	70	823	1057	82	70	671	792	94	94	134.9	228.9	134.9	228.9
65-69	656	827	31	35	700	991	57	58	700	991	57	58	475	719	92	98	0.949	0.891	0.949	0.891
70-74	501	679	23	30	574	840	38	49	574	840	38	49	406	616	26	41	128.0	204.0	128.0	204.0
75-79*	441	775	23	20	364	575	21	29	292	448	20	40	292	448	20	40	134.9	228.9	134.9	228.9
80-84*	0	0	0	0	182	318	12	12	160	266	13	22	160	266	13	22	0.949	0.891	0.949	0.891
85-UP	56	139	2	6	103	226	5	9	75	154	8	14	75	154	8	14	361.0	567.0	361.0	567.0
TOTALS	16509	18518	1544	1555	15966	18151	2357	2451	15105	16472	3156	3436	15105	16472	3156	3436	15105	16472	15105	16472
GRAND TOTAL				38126				38925									38126			

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS						CODE
	1949	1950	49-50	1959	1960	1961	59-61	1969	1970	1971	69-71		
												STATE	PENNSYLVANIA
CAUSE	1949	1950	49-50	1959	1960	1961	59-61	1969	1970	1971	SUM	1950 RANK BY POPULATION	314
TOTAL	411	467	878	469	506	570	1545	547	520	506	1573	1950 POP/SQ. MILE	10893
CV-RENAL	211	274	485	254	311	346	911	296	270	281	847	1970 POP/SQ. MILE	10603
HEART	155	206	361	191	228	248	667	223	221	217	661	1949 MED. FAM. INCOME	3334
												1969 MED. FAM. INCOME	9750
												URBAN CLASS	INDEPENDENT

CITY CHARACTERISTICS

CODE

STATE	314
1950 RANK BY POPULATION	10893
1950 POP/50. MILE	10603
1970 POP/50. MILE	3334
1949 MED. FAM. INCOME	9750
1969 MED. FAM. INCOME	INDEPENDENT
URBAN CLASS	-
1950 URBAN AREA RANK	31
JAN MEAN TEMPERATURE	75
JULY MEAN TEMPERATURE	44
MEAN ANN. PRECIPITATION	S
LAND RESOURCE REGION	SURFACE
WATER SOURCE	182 PPM
TOTAL HARDNESS	182 PPM
NON-CARBONATE HARDNESS	NO ARTIFICIAL, LOW NATURAL
FLUORIDATION STATUS	

PHILADELPHIA
-386-

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	13666	12903	3910	3993	13810	13343	7227	7264	9431	9149	6486	6603
1-4	60024	57184	16302	16143	52287	50082	28348	28592	36683	35546	27384	27238
5-9	60935	59277	15995	16222	58031	55431	30151	29862	49698	47516	38049	37684
10-14	51539	49747	13859	14297	55818	53337	23788	24286	50977	48761	38215	39181
15-19	51919	52902	11612	13683	48735	50379	16644	18850	49326	49249	30126	32527
20-24	63412	67226	13189	17684	44041	45961	14569	19233	50914	54548	21712	29094
25-29	69668	72412	16970	20593	43913	40978	16958	20742	42340	41796	19525	24954
30-34	65441	70769	15174	18670	45052	44881	18787	22483	31907	31447	17128	22106
35-39	63818	69230	15274	18373	46866	51048	19756	22488	30455	30101	17249	22369
40-44	60073	64032	13608	15661	47801	54256	16543	19183	34477	36425	18423	22696
45-49	54115	57812	12734	13225	48870	54662	14724	17050	37532	42739	18609	21544
50-54	53852	56995	10888	10436	46318	51623	12345	13884	38969	46612	15366	18316
55-59	47876	50262	7175	7040	42203	47368	11514	12357	38391	45347	12540	13438
60-64	39142	41859	5058	5045	37528	44199	8376	8934	34096	42177	10142	12548
65-69	29177	38549	3674	4210	32269	39088	6286	6857	26338	36571	8394	10931
70-74	19128	28381	2129	2404	22452	29466	3844	4509	20382	30969	5828	7312
75-79 #	16451	28193	1600	2022	12781	18355	2092	2780	13752	21789	3079	4173
80-84 #	0	0	0	0	5900	9790	950	1290	7198	12869	1491	2371
85-UP	2231	4377	244	472	2911	5656	557	930	3786	7834	1175	1886
TOTALS	822467	870170	179395	199573	707586	759893	253459	281574	607252	671465	310921	358971
GRAND TOTAL			2071605				2002512				1948609	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL
CV-RENAL	26576.0	42259.0	34430.0		48235.0	74139.0	73400.0	
	26576.0	35313.0	39816.9		38274.9	64947.8	70158.4	
		1.292	1.197			1.142	1.046	
HEART	19682.0	32411.0	26135.0					
	14573.4	24720.3	27328.4					
		1.351	1.311					
NON CV-R	21659.0	31880.0	38970.0					
	17658.5	29634.7	30341.5					
		1.224	1.076					
CANCER	7439.0	12627.0	12896.0					
	6193.5	10192.0	10606.6					
		1.201	1.239					

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1969				1971			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	23889	24346	48235	46235	24800	24881	74139	24932	24932	24460	24008	73400	24008	24460	24008	73400
CV-RENAL	13301	13275	26576	26576	14109	14184	42259	42259	11592	11592	11286	34430	11286	11592	11286	34430
HEART	10055	9627	19682	19682	10893	10901	32411	32411	8833	8742	8560	26135	8560	8742	8560	26135
NON CV-R	10588	11071	21659	21659	10691	10697	31880	31880	13340	12908	12722	38970	12722	12908	12722	38970
CANCER	3673	3766	7439	7439	4241	4227	12627	12627	4427	4427	4240	12896	4240	4427	4240	12896

CITY CHARACTERISTICS

STATE	PENNSYLVANIA	
	1950 RANK BY POPULATION	3
1970 POP/50. MILE	16286	
1970 POP/50. MILE	15164	
1949 MED. FAM. INCOME	3322	
1969 MED. FAM. INCOME	9366	
URBAN CLASS	CENTRAL	
1950 URBAN AREA RANK	4	
JAN MEAN TEMPERATURE	32	
JULY MEAN TEMPERATURE	81	
MEAN ANN. PRECIPITATION	33	
LAND RESOURCE REGION	S	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	75 PPM	
NON-CARBONATE HARDNESS	58 PPM	
FLUORIDATED STATUS	FLUORIDATED IN 1954	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	5375	5280	902	869	4887	4595	1247	1282	2511	2377	1096	1013
1-4	21574	21105	3539	3369	18405	17737	5007	4941	10001	9698	4064	3966
5-9	21561	20887	3562	3679	21255	20680	5589	5613	14696	13975	5868	5991
10-14	18505	18436	3122	3191	19459	19230	4677	4669	16959	16444	5885	6007
15-19	17473	20029	2643	3058	15978	18421	3321	3790	18564	19865	5094	5318
20-24	23410	26343	2829	3756	18331	17027	3350	3350	17045	20616	3222	4355
25-29	25175	26358	3241	3901	14028	13721	2827	3471	11957	11900	2586	3487
30-34	22802	25288	2842	3503	15425	16140	3328	3942	8520	9056	2307	3047
35-39	22120	24007	3023	3577	16062	17560	3415	3935	8455	9158	2335	3213
40-44	20022	21696	2986	3241	15928	18693	2964	3473	11231	12521	2781	3669
45-49	17923	19428	3138	2993	16511	18410	2988	3171	12440	14339	2901	3462
50-54	17640	18389	3053	2451	15255	17235	2621	2777	12791	15574	2539	3157
55-59	16569	16680	2950	1664	13505	15519	2744	2503	12576	15094	2422	2784
60-64	13880	14043	1322	1176	12225	13359	2316	2019	10821	13815	2114	2401
65-69	10710	11461	1087	926	9766	12552	1738	1532	8357	11680	2068	2253
70-74	6896	7514	618	529	4739	6093	593	575	4844	7367	1560	1656
75-79	5665	7214	415	406	4731	6096	247	265	4792	7396	1366	1437
80-84	721	1246	0	86	2208	3926	134	184	2450	4436	351	437
85-UP	721	1246	74	86	1043	1859	134	184	1470	2634	235	359
TOTALS	287961	305864	40446	42535	240041	262552	49277	52462	192050	220230	50293	57544
GRAND TOTAL				676806				604332				520117

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	16224.0	24897.0	1.327		16224.0	24897.0	1.327		16224.0	22257.0	1.096	
CV-RENAL	8664.0	13890.0	1.320		8664.0	13890.0	1.320		8664.0	12728.0	1.064	
HEART	6326.0	10021.0	1.349		6326.0	10021.0	1.349		6326.0	9709.0	1.114	
NON CV-R	7560.0	11007.0	1.334		7560.0	11007.0	1.334		7560.0	9529.0	1.141	
CANCER	2477.0	4125.0	1.232		2477.0	4125.0	1.232		2477.0	3967.0	1.263	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	1959	1961	1969	1970	1971	SUM	STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE
TOTAL	8115	8109	8223	8070	7573	7314	7370	22257	PENNSYLVANIA	12	12487	9422
CV-RENAL	4276	4388	4561	4548	4295	4198	4235	12728		3114	1949 MED. FAM. INCOME	8800
HEART	3106	3220	3302	3282	3297	3187	3225	9709		8800	1950 URBAN AREA RANK	29
NON CV-R	3839	3721	3662	3522	3278	3116	3135	9529		8	JAN MEAN TEMPERATURE	72
CANCER	1270	1207	1365	1385	1317	1262	1388	3967		36	MEAN ANN. PRECIPITATION	18
											LAND RESOURCE REGION	12
											WATER SOURCES	12
											TOTAL HARDNESS	12
											NON-CARBONATE HARDNESS	12
											FLUORIDATION STATUS	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950		
	WM	WP	NM
LT 1	1123	1021	6
1-4	4538	4380	33
5-9	4691	4315	20
10-14	4182	3977	40
15-19	3875	4362	31
20-24	4264	5620	29
25-29	4506	5219	24
30-34	4614	5150	15
35-39	4592	5163	24
40-44	4317	4657	21
45-49	3786	4179	21
50-54	3662	4294	30
55-59	3461	3771	20
60-64	2955	3265	16
65-69	2195	2750	15
70-74	1402	1835	12
75-79 #	1173	1645	6
80-84 #		0	0
85-UP	162	278	0
TOTALS	59538	65282	363
GRAND TOTAL			353
			125536

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	1959	1960	1961	49-61 SOM
TOTAL	1639	1667	1654	1735	1540	4929
CV-FEMAL	956	942	1798	1024	950	2994
HEART	848	736	1384	817	731	2346
NON CV-R	783	725	1508	634	711	1935
NON CV-R	252	267	263	303	251	917
CANCER	252	267	263	303	251	917

CITY CHARACTERISTICS CODE

STATE	PENNSYLVANIA
1950 RANK BY POPULATION	62
1950 POP./SQ. MILE	5042
1970 POP./SQ. MILE	4030
1949 MED. F.M. INCOME	2925
1969 MED. F.M. INCOME	8273
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	53
JAN MEAN TEMPERATURE	26
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	40
LAND RESOURCE REGION	F
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	26 PPM
NON-CARBONATE HARDNESS	21 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1+ 1	284	259	12	7	272	237	13	14	172	152	15	12
1-4	977	990	30	24	1039	981	68	62	677	656	50	50
5-9	1023	957	23	40	1143	1097	97	83	944	904	83	81
10-14	808	834	32	35	1024	1022	53	54	1044	1018	100	74
15-19	740	847	31	32	711	786	28	46	924	1006	70	73
20-24	916	1032	38	31	530	729	25	37	698	818	30	55
25-29	1095	1143	25	24	664	675	25	37	591	619	31	33
30-34	1087	1129	24	35	715	742	43	41	440	477	22	41
35-39	973	992	31	32	804	875	41	39	447	488	32	47
40-44	859	822	24	11	881	925	26	35	573	631	37	40
45-49	727	842	22	24	735	872	36	37	612	714	36	41
50-54	752	736	21	17	708	664	22	21	712	799	26	33
55-59	672	659	21	12	586	691	18	19	609	735	21	23
60-64	601	598	11	6	517	612	17	21	515	544	13	22
65-69	496	520	9	6	504	563	18	15	383	573	16	12
70-74	302	371	5	6	363	445	7	6	315	447	17	20
75-79*	283	318	1	2	251	317	6	3	225	346	6	9
80-84*	0	0	0	0	116	163	3	1	132	212	4	5
85-UP	26	62	2	1	67	85	0	0	71	142	3	4
TOTALS	12581	13155	362	346	11630	12501	558	578	10085	11281	612	675
GRAND TOTAL				2654				25267				22653

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*
TOTAL	534.0	921.0	827.9	1112	887.0	842.8
	1.118	1.112	1.112	1.052		
CV-PENAL	270.0	518.0	472.4	501.0	501.0	502.9
	259.6	1.040	1.097	0.996		
HEART	181.0	391.0	187.6	354.1	396.0	354.1
	0.965	1.164	0.965	1.125		
NON CV-R	264.0	403.0	217.9	355.6	386.0	339.9
	1.212	1.133	1.133	1.136		
CANCER	87.0	148.0	79.2	131.3	148.0	131.3
	1.098	1.112	1.098	1.127		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				1950		1959-61		1969-71	
	1949	1950	1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	275	259	302	325	294	921	296	279	312	887
CV-PENAL	140	130	164	189	165	518	170	158	173	501
HEART	95	86	119	142	130	391	130	122	144	396
NON CV-R	135	129	138	136	129	403	126	121	139	386
CANCER	40	47	54	47	47	148	49	49	50	148

CITY CHARACTERISTICS

CODE

STATE	PENNSYLVANIA	
	1950 RANK BY POPULATION	458
1950 POP/50. MILE	7348	
1970 POP/50. MILE	5961	
1949 MED. FAM. INCOME	3895	
1969 MED. FAM. INCOME	5028	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	28	
JULY MEAN TEMPERATURE	73	
MEAN ANN. PRECIPITATION	34	
LAND RESOURCE REGION	5	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	84 PPM	
NON-CARBONATE HARDNESS	35 PPM	
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					1960					1970				
	WM	WF	NN	NF	NE	WM	WF	NN	NF	NE	WM	WF	NN	NF	NE
LT 1	218	198	18	15		211	204	21	21		142	133	15	22	
1-4	922	880	67	81		789	800	97	95		508	526	74	69	
5-9	836	863	84	84		815	862	107	96		647	630	94	99	
10-14	771	746	96	80		815	801	71	105		691	693	94	88	
15-19	882	872	71	85		853	769	70	72		937	745	93	78	
20-24	1150	1067	60	83		704	780	57	57		925	826	47	83	
25-29	1044	1153	74	80		622	589	60	67		514	541	45	61	
30-34	981	1018	59	80		631	728	49	62		374	422	51	49	
35-39	869	934	69	97		727	741	66	71		352	389	30	52	
40-44	765	844	60	62		652	777	61	85		454	554	34	60	
45-49	683	703	90	67		665	751	68	91		500	592	34	63	
50-54	595	707	75	77		631	675	58	56		496	608	68	79	
55-59	583	614	57	46		521	599	72	71		363	624	57	63	
60-64	486	529	54	30		477	568	60	63		330	609	51	41	
65-69	432	483	49	37		406	527	56	54		333	406	45	51	
70-74	308	334	27	26		327	426	29	29		243	317	21	25	
75-79*	299	333	16	10		395	286	21	23		162	317	21	25	
80-84*	0	0	0	0		131	105	11	9		114	204	11	19	
85-UP	37	71	2	2		89	117	10	8		71	140	10	6	
TOTALS	11861	12349	1028	1042		10251	11125	1047	1122		8401	9420	941	1065	
GRAND TOTAL				26280					23545					19827	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	751.0	1110.0	959.0
EXPECTED*	502.0	855.0	798.3
OBS/EXP	1.496	1.303	1.201
CV-RENAL			
OBSERVED	409.0	668.0	532.0
EXPECTED*	275.4	498.0	473.2
OBS/EXP	1.464	1.341	1.110
HEART			
OBSERVED	279.0	459.0	386.0
EXPECTED*	198.1	347.7	331.0
OBS/EXP	1.409	1.320	1.166
NON CV-R			
OBSERVED	342.0	446.0	427.0
EXPECTED*	222.6	357.0	319.0
OBS/EXP	1.536	1.249	1.339
CANCER			
OBSERVED	116.0	174.0	191.0
EXPECTED*	80.8	132.4	121.4
OBS/EXP	1.435	1.314	1.574

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS				
	1949	1950	1959	1960	1961	1969	1970	1971	SUM	69-71
TOTAL	380	371	381	367	366	355	290	314	959	959
CV-RENAL	212	197	217	214	237	201	159	172	532	532
HEART	144	135	156	138	165	146	113	127	386	386
NON CV-R	168	174	164	154	146	154	131	142	427	427
CANCER	58	58	63	59	52	69	56	66	191	191
STATE										
1950 RANK BY POPULATION										460
1950 POP/50. MILE										9062
1970 POP/50. MILE										6837
1949 MED. FAM. INCOME										3067
1969 MED. FAM. INCOME										1757
URBAN CLASS AREA RANK										INDPENDENT
1950 URBAN AREA RANK										31
JAN MEAN TEMPERATURE										72
JULY MEAN TEMPERATURE										72
MEAN ANNU PRECIPITATION										40
LAND RESOURCE REGION										N
WATER SOURCE										SURFACE
TOTAL HARDNESS										60 PPM
NON-CARBONATE HARDNESS										40 PPM
FLUORIDATION STATUS										NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	308	285	9	7	302	289	15	14	162	153	60	60
1-4	1106	1031	22	28	1046	1025	36	54	540	485	240	245
5-9	1036	979	26	24	1088	1144	45	63	591	607	326	362
10-14	811	818	19	18	1033	988	50	41	666	704	385	344
15-19	745	873	24	13	780	953	19	24	653	739	254	314
20-24	1079	1316	18	24	788	1063	17	20	780	1084	167	237
25-29	1405	1397	19	20	864	885	23	24	793	710	156	232
30-34	1161	1210	19	13	883	862	31	42	430	439	158	218
35-39	1015	1230	20	12	813	915	27	27	352	435	187	216
40-44	1046	1188	10	18	792	968	24	20	434	569	183	199
45-49	973	1133	21	19	842	1105	19	12	504	660	161	177
50-54	978	1097	15	15	822	1068	15	25	523	627	73	62
55-59	865	974	9	12	767	1115	20	13	663	911	71	66
60-64	665	882	12	8	709	984	13	18	661	910	49	58
65-69	521	703	7	7	635	936	6	11	546	855	38	45
70-74	340	524	3	6	425	734	3	3	449	727	23	30
75-79*	352	655	3	4	232	548	2	2	298	598	7	26
80-84*	0	0	0	0	131	297	1	2	173	392	10	6
85-UP	56	143	0	0	92	202	1	3	109	270	7	16
TOTALS	14462	16438	270	248	13310	15968	370	418	9299	12010	2561	2910
GRAND TOTAL				3448				30066				26780

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	49-50 SUM	59-61 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	298	364	662	1108	371	368	369	1108	361	368	367	1096
CV-PENAL	181	232	413	667	229	222	216	667	206	209	213	628
HEART	141	162	303	485	164	156	165	485	151	156	180	487
NON CV-R	117	132	249	441	142	146	153	441	155	159	154	468
CANCER	46	48	94	177	59	59	59	177	84	76	76	236

CITY CHARACTERISTICS

STATE	CODE
PENNSYLVANIA	383
1950 RANK BY POPULATION	15709
1950 POP/SQ. MILE	12173
1970 POP/SQ. MILE	12173
1949 MED. FAM. INCOME	3848
1969 MED. FAM. INCOME	9237
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	8
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	72
MEAN ANNUAL PRECIPITATION	36
LAND RESOURCE REGION	N
WATER SOURCE	SURFACE
TOTAL HARDNESS	269 SPM
NON-CARBONATE HARDNESS	253 SPM
FLUORIDATION STATUS	FLUORIDATED IN 1953

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	DEATHS AND DEATH RATIOS BY CAUSE AND CENSUS PERIOD				DEATHS AND DEATH RATIOS BY CAUSE AND CENSUS PERIOD			
	1949-50	1959-61	1969-71	TOTAL	1949-50	1959-61	1969-71	TOTAL
OBSERVED	662.0	1108.0	1096.0		OBSERVED	662.0	1108.0	
EXPECTED*	674.0	1170.1	1271.0		EXPECTED*	674.0	1170.1	
OBS/EXP	0.982	0.947	0.862		OBS/EXP	0.982	0.947	
CV-PENAL	413.0	667.0	628.0		CV-PENAL	413.0	667.0	
OBSERVED	386.7	692.4	777.5		OBSERVED	386.7	692.4	
EXPECTED*	1.066	0.963	0.808		EXPECTED*	1.066	0.963	
OBS/EXP					OBS/EXP			
HEART	303.0	495.0	487.0		HEART	303.0	495.0	
OBSERVED	273.8	497.4	534.3		OBSERVED	273.8	497.4	
EXPECTED*	1.107	0.995	0.911		EXPECTED*	1.107	0.995	
OBS/EXP					OBS/EXP			
MON CV-R	249.0	441.0	468.0		MON CV-R	249.0	441.0	
OBSERVED	287.2	477.6	493.4		OBSERVED	287.2	477.6	
EXPECTED*	0.867	0.923	0.949		EXPECTED*	0.867	0.923	
OBS/EXP					OBS/EXP			
CANCER	94.0	177.0	236.0		CANCER	94.0	177.0	
OBSERVED	108.4	185.6	187.3		OBSERVED	108.4	185.6	
EXPECTED*	0.867	0.954	1.26C		EXPECTED*	0.867	0.954	
OBS/EXP					OBS/EXP			

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NF	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	388	397	9	16	357	412	23	18	316	294	10	16
1-4	1719	1525	24	36	1632	1589	41	58	1154	1059	56	61
5-9	1579	1521	43	52	1808	1807	60	43	1565	1537	66	70
10-14	1360	1321	57	45	1715	1651	37	44	1652	1617	63	78
15-19	1356	1597	37	35	1428	1555	35	43	2184	1707	97	56
20-24	1656	1795	39	31	1896	1738	37	22	2184	1707	97	56
25-29	1536	1884	34	39	1893	1738	37	22	1009	1001	27	49
30-34	1536	1884	34	39	1893	1738	37	22	742	828	34	38
35-39	1715	1531	30	29	1171	1397	23	38	749	837	34	38
40-44	1465	1590	21	28	1201	1377	23	38	925	1017	28	32
45-49	1301	1478	26	29	1143	1320	28	33	909	1160	34	27
50-54	1289	1423	36	31	1155	1316	18	19	917	1108	25	29
55-59	1168	1347	23	25	1006	1220	30	30	886	1070	24	27
60-64	1019	1255	17	15	966	1179	24	21	797	1065	16	18
65-69	789	1052	16	16	825	1133	18	24	664	957	21	28
70-74	583	798	18	17	626	1027	14	14	536	867	18	22
75-79*	582	894	14	11	374	654	7	15	352	670	7	16
80-84*	0	0	0	0	216	398	0	7	194	488	3	14
85-UP	89	160	1	1	120	248	3	5	110	268	2	6
TOTALS	20926	23141	479	501	19152	21785	498	532	17211	19478	584	645
GRAND TOTAL				45047				41967				37918

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1099.0	978.4	1.123	1223.0	1440.0	1.110
CV-RENAL	652.0	563.9	1.156	1008.0	829.0	1.098
HEART	458.0	400.1	1.145	712.0	623.0	1.103
NON CV-R	447.0	414.5	1.078	715.0	611.0	1.069
CANCER	164.0	158.3	1.036	264.0	219.5	1.082

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949-50		1959-61		1969-71	
	1949	1950	1959	1960	1961	SUM
TOTAL	517	582	596	581	546	1723
CV-RENAL	307	345	351	335	322	1008
HEART	236	222	233	236	243	712
NON CV-R	210	237	245	244	224	715
CANCER	77	87	83	83	98	264

STATE	1950 RANK BY POPULATION		1960 RANK BY POPULATION		1970 RANK BY POPULATION	
	1950	1960	1950	1960	1970	SUM
PENNSYLVANIA	263	5119	482	472	486	1440
1950 POP/SQ. MILE	4167	3114	278	260	291	829
1970 POP/SQ. MILE	8253	8253	205	191	227	611
1949 MED. FAM. INCOME	INDEPENDENT	INDEPENDENT	212	212	195	260
1969 MED. FAM. INCOME	INDEPENDENT	INDEPENDENT	82	82	90	260
URBAN CLASS	28	28	82	82	90	260
1950 URBAN AREA RANK	28	28	82	82	90	260
JAN MEAN TEMPERATURE	73	73	82	82	90	260
JULY MEAN TEMPERATURE	73	73	82	82	90	260
MEAN ANN. PRECIPITATION	39	39	82	82	90	260
LAND RESOURCE REGION	N	N	82	82	90	260
WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE	82	82	90	260
TOTAL HARDNESS	16 PPM	16 PPM	82	82	90	260
NON-CARBONATE HARDNESS	8 PPM	8 PPM	82	82	90	260
FLUORIDATION STATUS	FLUORIDATED IN 1966	FLUORIDATED IN 1966	82	82	90	260

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	498	492	45	36	492	492	83	79
1-4	2188	2059	157	187	1884	1841	301	318
5-9	1935	1971	168	157	2007	2115	242	310
10-14	1725	1891	136	136	1725	1718	232	292
15-19	1621	1891	136	136	1483	1718	173	162
20-24	1601	1891	136	136	1308	1604	125	151
25-29	2033	2519	120	149	1476	1387	153	173
30-34	2020	2215	108	116	1477	1555	126	177
35-39	1865	2148	83	96	1512	1710	149	152
40-44	1983	2149	110	106	1423	1609	130	140
45-49	1854	2000	97	105	1411	1653	94	91
50-54	1758	1899	105	95	1478	1747	101	97
55-59	1402	1671	58	50	1426	1651	95	99
60-64	1247	1467	44	36	1267	1453	81	72
65-69	987	1222	30	23	1036	1410	59	55
70-74	681	935	20	30	779	1145	27	34
75-79*	680	949	16	26	501	757	16	14
80-84*	0	0	0	0	272	403	5	10
85-UP	109	140	8	3	129	255	8	9
TOTALS	27107	29692	1562	1592	23306	26418	2315	2465
GRAND TOTAL				59953				54504

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1548.0	2274.0	1.306		1185.0	1945.3	1.169		2281.0	2032.2	1.122	
CV-RENAL												
OBSERVED	914.0	1336.0			663.8	1120.1			1240.0	1209.8		
EXPECTED*												
OBS/EXP	1.377	1.193			1.377	1.193			1.025	1.025		
HEART												
OBSERVED	615.0	914.0			473.1	790.8			935.0	840.0		
EXPECTED*												
OBS/EXP	1.300	1.156			1.300	1.156			1.113	1.113		
NON CV-R												
OBSERVED	634.0	938.0			521.3	825.2			1041.0	822.5		
EXPECTED*												
OBS/EXP	1.216	1.137			1.216	1.137			1.266	1.266		
CANCER												
OBSERVED	229.0	367.0			193.8	308.8			399.0	307.0		
EXPECTED*												
OBS/EXP	1.182	1.169			1.182	1.169			1.299	1.299		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	
	STATE	PENNSYLVANIA
1950 BANK BY POPULATION	194	14275
1950 POP/50. MILE	14275	9497
1970 POP/50. MILE	3293	3293
1949 MED. FM. INCOME	8569	8569
1969 MED. FM. INCOME	8569	8569
URBAN CLASS	CENTRAL	CENTRAL
1950 URBAN AREA RANK	142	142
JAN MEAN TEMPERATURE	30	30
JULY MEAN TEMPERATURE	74	74
MEAN ANN. PRECIPITATION	40	40
LAND RESOURCE REGION	S	S
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	49 PPM	49 PPM
NON-CARBONATE HARDNESS	19 PPM	19 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	442	385	0	0	503	606	3	2
1-4	1910	1784	1	1	2699	2410	9	4
5-9	1979	1971	3	0	2942	2941	13	4
10-14	1598	1459	22	7	2876	2750	20	16
15-19	1700	1593	12	11	2121	2223	27	8
20-24	1890	1844	16	8	1362	1472	15	2
25-29	2031	2125	20	4	1597	1586	18	5
30-34	1950	2024	13	3	2072	2386	14	13
35-39	2149	2273	6	7	2476	2641	14	10
40-44	1972	2184	11	6	2388	2539	21	8
45-49	1887	2023	9	3	2352	2454	9	8
50-54	1781	1889	10	5	2035	2298	8	5
55-59	1666	1681	6	3	1772	1984	12	5
60-64	1361	1429	9	1	1505	1723	10	3
65-69	1029	1200	5	6	1297	1493	10	5
70-74	710	836	2	2	929	1232	8	6
75-79*	775	948	5	0	592	852	4	3
80-84*	0	0	0	0	356	508	5	4
85-UP	109	228	1	1	195	321	2	2
TOTALS	26939	27896	157	68	31969	34463	220	114
GRAND TOTAL			55060				66766	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	48-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	481	444	935	1823	653	669	716	2038
CV-RENAL	268	267	535	1080	354	365	387	1125
HEART	188	195	383	924	270	289	328	867
NON CV-R	213	177	390	339	299	304	309	912
CANCER	83	86	189	339	140	155	157	452

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	DEATHS AND DEATH RATIOS BY CAUSE AND CENSUS PERIOD			
	1949-50	1959-61	1969-71	
TOTAL	925.0	1823.0	2638.0	
OBSERVED*	1169.5	2268.9	2765.6	
EXPECTED*	0.778	0.803	0.737	
OBS/EXP				
CV-RENAL	535.0	1088.0	1126.0	
OBSERVED*	688.3	1323.6	1671.1	
EXPECTED*	0.777	0.822	0.674	
OBS/EXP				

HEART	383.0	824.0	887.0	
OBSERVED*	491.3	939.3	1173.0	
EXPECTED*	0.780	0.877	0.756	
OBS/EXP				
NON CV-R	390.0	735.0	912.0	
OBSERVED*	501.1	945.3	1094.4	
EXPECTED*	0.778	0.778	0.833	
OBS/EXP				

CANCER

OBSERVED	169.0	339.0	452.0	
EXPECTED*	195.0	364.9	435.2	
OBS/EXP	0.867	0.929	1.039	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	CITY CHARACTERISTICS		RHODE ISLAND
	1950 RANK BY POPULATION	210	
1950 POP/50. MILE		318	
1970 POP/50. MILE		250	
1949 MED. FAM. INCOME		520	
1949 MED. FAM. INCOME		10778	
1969 MED. FAM. INCOME		FRIDGE	
1969 MED. FAM. INCOME		21	
JAN MEAN TEMPERATURE		28	
JULY MEAN TEMPERATURE		71	
MEAN ANNUAL PRECIPITATION		39	
LAND RESOURCE REGION		R	
WATER SOURCE		SURFACE	
TOTAL HARDNESS		23 PPM	
NON-CARBONATE HARDNESS		8 PPM	
FLUORIDATION STATUS		FLUORIDATED IN 1952	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	HF	NM	NP	WM	HF	NM	NP	WM	HF	NM	NP
IT 1	750	668	3	5	847	863	12	33	604	581	10	3
1-4	3143	2944	16	14	3244	3148	37	33	2389	2292	35	31
5-9	2877	2946	18	14	3632	3619	39	32	3205	3105	34	33
10-14	2477	2453	21	24	3387	3195	25	26	3456	3359	37	31
15-19	2544	2594	7	15	2377	2665	9	20	3020	3243	26	32
20-24	2790	3243	10	19	1862	2223	8	15	2510	3040	21	27
25-29	3308	3512	18	25	2086	2266	15	21	2188	2220	28	26
30-34	3056	3328	11	12	2429	2669	21	21	1614	1708	25	24
35-39	2953	3182	11	9	2651	2980	15	21	1677	1867	19	20
40-44	2680	2919	9	40	2608	2902	17	13	2086	2412	22	23
45-49	2634	2849	9	8	2559	2813	12	9	2420	2694	14	21
50-54	2529	2699	7	13	2150	2498	13	14	2295	2709	14	12
55-59	2234	2482	6	5	2242	2552	5	11	2186	2592	14	16
60-64	1815	2051	9	4	1981	2473	10	14	1768	2251	8	15
65-69	1248	1570	8	5	1613	2021	8	6	1503	2180	8	11
70-74	864	1183	4	5	1181	1599	6	5	1199	1914	7	12
75-79*	776	1275	5	5	611	1001	11	5	808	1312	6	3
80-84*	0	0	0	0	325	561	4	3	466	756	2	3
85-89	108	179	1	1	172	339	1	0	230	506	1	4
TOTALS	38796	42277	175	188	38077	42387	268	269	35564	40741	331	348
GRAND TOTAL				81001				81001				76984

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	2651	2004	111	102	1876	1882	210	197
5-4	8352	8323	435	411	7558	7597	783	757
5-9	8352	8412	424	411	7558	7597	783	757
10-14	7023	7041	374	386	7313	7391	593	551
15-19	8067	8057	311	373	7220	7366	382	467
20-24	10276	10346	349	445	6616	6814	390	451
25-29	10257	10512	412	411	5422	5328	375	467
30-34	8956	9523	299	328	5701	6022	421	489
35-39	8209	9362	266	285	5990	6591	403	420
40-44	7469	8751	199	225	5679	6731	293	338
45-49	6814	7738	236	226	5853	6895	219	278
50-54	6630	7776	236	266	5450	6835	165	219
55-59	6536	7276	205	154	5120	6164	174	197
60-64	5558	6303	168	119	4647	5866	164	163
65-69	4285	5475	137	125	4401	5652	153	112
70-74	2911	3751	73	69	3331	4467	97	105
75-79*	2518	3693	54	70	1935	2942	62	70
80-84*	0	0	0	0	947	1581	27	34
85-UP	379	717	10	16	473	905	13	26
TOTALS	114932	125061	4299	4382	92549	102976	5701	6272
GRAND TOTAL				248674				207498

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	49-50 SUM	59-61 SUM
TOTAL	2828	2884	5712	8408
CV-RENAL	1532	1615	3147	4931
HEART	1147	1157	2304	3722
NON CV-R	1296	1269	2565	3477
CANCER	458	493	951	1468

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	DEATHS AND DEATH RATIOS BY CAUSE AND CENSUS PERIOD			
	1949-50	1959-61	1969-71	
TOTAL	OBSERVED 5712.0 EXPECTED* 4821.2 OBS/EXP 1.185	8408.0 7349.9 1.144	7312.0 7334.7 0.997	
CV-RENAL	OBSERVED 3147.0 EXPECTED* 2700.1 OBS/EXP 1.166	4931.0 4243.8 1.162	3997.0 4404.5 0.907	
HEART	OBSERVED 2304.0 EXPECTED* 1930.5 OBS/EXP 1.194	3722.0 3062.8 1.238	3079.0 3062.7 1.005	
NON CV-R	OBSERVED 2565.0 EXPECTED* 2121.1 OBS/EXP 1.209	3477.0 3106.1 1.119	3315.0 2930.2 1.131	
CANCER	OBSERVED 951.0 EXPECTED* 797.3 OBS/EXP 1.193	1468.0 1183.2 1.241	1404.0 1116.6 1.255	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	CITY CHARACTERISTICS				CODE
	STATE	RANK BY POPULATION	RHODE ISLAND		
TOTAL	1950 POP/1000	43	43		
CV-RENAL	1950 POP/1000	1392	1392		
HEART	1970 POP/1000	9901	9901		
NON CV-R	1949 MED. FAM. INCOME	2550	2550		
CANCER	1963 MED. FAM. INCOME	8430	8430		
	URBAN CLASS	CENTRAL	CENTRAL		
	1950 URBAN AREA RANK	21	21		
	JAN MEAN TEMPERATURE	28	28		
	JULY MEAN TEMPERATURE	71	71		
	MEAN ANN. PRECIPITATION	39	39		
	LAND RESOURCE REGION	R	R		
	WATER SOURCE	SURFACE	SURFACE		
	TOTAL HARDNESS	24 PPM	24 PPM		
	NON-CARBONATE HARDNESS	10 PPM	10 PPM		
	FLUORIDATION STATUS	FLUORIDATED IN 1952	FLUORIDATED IN 1952		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
1-4	403	431	2	7	728	703	4	5	591	589	4	3
5-9	2060	1966	11	6	3301	3159	23	18	2682	2662	18	20
10-14	1934	1810	10	11	4072	3773	9	26	4347	4117	33	17
15-19	1463	1407	12	10	3499	3359	12	14	4570	4391	25	29
20-24	1388	1317	10	11	2102	2189	9	8	3886	3771	20	19
25-29	1283	1453	7	6	1255	1414	8	9	2461	2702	15	24
30-34	1689	1857	10	9	1590	1876	13	17	2223	2562	10	13
35-39	1704	1732	4	5	2396	2723	12	13	2075	2149	13	27
40-44	1644	1701	5	3	2892	2988	10	9	2207	2365	14	25
45-49	1551	1571	12	4	2501	2545	7	9	2664	2903	16	19
50-54	1383	1380	5	3	2142	2104	7	4	3016	3130	28	21
55-59	1296	1263	6	4	1937	1921	8	7	2559	2682	18	13
60-64	1042	980	1	4	1575	1556	4	7	2150	2264	6	9
65-69	822	815	4	7	1232	1362	6	1	1723	1901	6	9
70-74	605	678	1	6	914	1122	4	5	1158	1565	10	6
75-79	468	536	3	2	660	835	4	7	926	1281	7	8
80-84	435	571	4	1	433	520	3	4	555	919	3	6
85-89	0	0	0	0	200	286	1	1	301	557	1	6
90-94	72	99	0	0	110	179	1	0	183	380	0	3
TOTALS	21242	21567	116	103	33539	34654	147	164	40277	42890	250	277
GRAND TOTAL				43028				68504				83694

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	802.0	749.8	1.070	1737.0	1685.0	1.031	2192.0	2416.3	0.907
CV-RENAL	439.0	412.8	1.063	1039.0	912.5	1.139	1240.0	1392.1	0.891
HEART	316.0	296.4	1.066	806.0	657.7	1.226	981.0	589.6	0.991
NON CV-R	363.0	337.0	1.077	698.0	772.6	0.903	952.0	1024.1	0.930
CANCER	144.0	122.1	1.179	307.0	271.3	1.107	456.0	392.2	1.163
OBSERVED	802.0	749.8	1.070	1737.0	1685.0	1.031	2192.0	2416.3	0.907
EXPECTED*	749.8	749.8	1.000	1685.0	1685.0	1.000	2416.3	2416.3	1.000
OBS/EXP	1.070	1.000	1.070	1.031	1.000	1.031	0.907	1.000	0.907

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1971			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	410	392	802	439	557	584	1737	1039	677	766	749	2192	391	423	426	1240
CV-RENAL	220	219	439	316	340	362	337	268	391	423	426	1240	331	331	333	981
HEART	169	147	316	254	254	284	268	806	317	331	333	981	331	331	333	981
NON CV-R	190	173	363	217	217	222	259	698	286	343	323	952	323	323	323	952
CANCER	76	68	144	102	102	94	111	307	141	170	145	456	145	145	145	456

CITY CHARACTERISTICS

STATE	RHODE ISLAND	
	1950 POP/1000	1970 POP/1000
1950 POP/1000	277	1284
1970 POP/1000	277	2398
1949 MED. FAM. INCOME	3463	11006
1969 MED. FAM. INCOME	11006	FRINGE
URBAN CLASS	21	21
1950 URBAN AREA PAVK	28	28
JAN MEAN TEMPERATURE	71	71
JULY MEAN TEMPERATURE	39	39
MEAN ANN. PRECIPITATION	39	39
LAND RESOURCE REGION	R	R
WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE
TOTAL HARDNESS	23 PPM	23 PPM
NON-CARBONATE HARDNESS	6 PPM	6 PPM
FLUORIDATION STATUS	UNCERTAIN	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	NM	NP
1	566	451	2	5
1-4	2039	2049	13	14
5-9	1718	1899	9	4
10-14	1718	1630	16	8
15-19	1525	1690	5	1
20-24	1756	2069	7	11
25-29	1935	2248	13	1
30-34	1836	1980	6	1
35-39	1806	1891	8	3
40-44	1694	1878	0	4
45-49	1625	1869	4	4
50-54	1468	1660	8	2
55-59	1289	1491	3	4
60-64	967	1131	3	2
65-69	713	884	0	0
70-74	498	608	3	0
75-79*	0	66	0	1
80-84*	0	0	0	0
85-Up	58	99	0	0
TOTALS	23904	26133	102	72
GRAND TOTAL				50211

1960	WM	WF	NM	NP
	434	505	8	5
	1945	1873	30	34
	2202	2088	37	22
	2056	2050	23	23
	1355	1518	12	9
	1179	1321	16	16
	1216	1246	13	20
	1434	1533	10	20
	1522	1675	12	10
	1427	1629	7	5
	1435	1519	4	5
	1348	1570	1	4
	1299	1567	3	5
	1107	1361	5	1
	914	1191	3	1
	624	855	2	1
	357	554	1	0
	167	273	1	0
	95	158	0	0
	22116	24596	188	180
				17080

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SDR	1959	1960	1961	59-61 SDR
TOTAL	500	549	1049	517	560	511	1588
CV-RENAL	280	297	577	303	346	317	966
HEART	193	227	420	253	274	262	789
NON CV-R	220	252	472	214	214	194	622
CANCER	76	101	177	96	116	181	293

CITY CHARACTERISTICS	CODE
STATE	PHODE ISLAND
1950 BANK BY POPULATION	232
1950 POP/SQ. MILE	5838
1970 POP/SQ. MILE	5927
1949 MED. FAM. INCOME	3051
1969 MED. FAM. INCOME	8667
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	29
JULY MEAN TEMPERATURE	73
MEAN ANNU. PRECIPITATION	47
LAND RESOUECF REGION	F
WATER SOURCE	SURFACE
TOTAL HARDNESS	12 PPM
NON-CARBONATE HARDNESS	7 PPM
FLUORIDATION STATUS	UNCERTAIN

CAUSE		1949-50	1959-61	1969-71
TOTAL	OBSERVED	1049.0	1588.0	1716.0
	EXPECTED*	836.5	1451.3	1610.2
	OBS/EXP	1.254	1.094	1.066
CV-RENAL	OBSERVED	577.0	966.0	982.0
	EXPECTED*	449.1	819.9	942.6
	OBS/EXP	1.285	1.178	1.042
HEART	OBSERVED	420.0	789.0	791.0
	EXPECTED*	325.0	588.9	667.9
	OBS/EXP	1.292	1.340	1.184
NON CV-R	OBSERVED	472.0	622.0	734.0
	EXPECTED*	337.4	631.4	667.6
	OBS/EXP	1.218	0.985	1.099
CANCER	OBSERVED	177.0	293.0	325.0
	EXPECTED*	141.2	242.9	260.7
	OBS/EXP	1.253	1.205	1.247

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
IT 1	420	352	438	435	420	257	516	498	284	274	293	324
1-4	1401	1396	1730	1845	896	876	1958	2014	831	831	1256	1266
5-9	1408	1422	1740	1869	951	936	2138	2136	1259	1279	1861	1999
10-14	1163	1131	1389	1463	1032	1072	1930	2026	1416	1465	2064	2051
15-19	1854	1360	1142	1441	2421	1253	1366	1573	2116	1525	1640	1694
20-24	2833	1968	942	1462	3537	1238	855	1039	2620	2055	910	1216
25-29	1948	1746	1151	1558	1299	767	831	1070	1280	1224	729	896
30-34	1417	1564	1005	1315	1122	710	878	1201	837	837	533	805
35-39	1219	1474	1084	1513	995	882	954	1262	1262	970	554	870
40-44	1208	1426	803	1102	845	964	868	1182	967	1075	650	956
45-49	962	1206	652	980	803	1024	894	1096	1092	1313	690	958
50-54	942	1063	552	664	803	1024	662	814	1121	1154	657	887
55-59	825	953	372	488	513	945	555	682	910	1114	617	781
60-64	676	826	302	358	752	599	344	469	716	1052	482	617
65-69	461	659	215	390	461	671	258	466	521	895	351	584
70-74	297	539	105	197	350	621	194	288	396	718	198	353
75-79*	228	547	103	180	415	411	72	152	238	577	105	204
80-84*	0	0	0	0	103	253	28	79	166	384	54	108
85-89†	34	94	18	50	51	159	17	57	91	269	43	98
TOTALS	19519	19768	13783	17104	17503	14810	15508	18104	17585	18991	13702	16667
GRAND TOTAL				70174			65925					66945

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR										
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM
TOTAL	797	843	1640	826	759	842	2427	933	806	929	2668
CV-GENERAL	337	313	723	347	313	362	1022	487	390	478	1395
HEART	223	235	453	214	202	233	639	334	256	292	892
NON CV-R	460	405	917	479	446	480	1405	446	436	501	1373
CANCER	97	95	192	100	84	112	296	142	132	159	433

EXAM	RESOURCE	LOCATION
WATER SOURCE		SURFACE
TOTAL HARDNESS	21 PPM	
NON-CARBONATE HARDNESS	2 PPM	
FLUORIDATION STATUS	NO ARTIFICIAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WP	NM	NP
17-19	555	529	352	380
20-24	2188	2075	1407	1402
25-29	2078	2072	1333	1322
30-34	1530	1445	1090	1152
35-39	1610	1918	1093	1175
40-44	3043	2971	1496	1897
45-49	2896	2678	1551	1585
50-54	2525	2457	1314	1338
55-59	2181	2347	1272	1396
60-64	1923	2136	972	1107
65-69	1592	1830	742	956
70-74	1406	1561	660	732
75-79	1117	1292	464	455
80-84	849	1095	375	451
85-89	646	936	318	453
90-94	397	654	168	190
95-99	277	535	122	159
100+	0	0	0	0
TOTALS	35	91	16	44
GRAND TOTAL	26849	28822	14745	16498
				86914

1960	NP	RM	NP	RM
627	599	445	470	
265	2194	1580	1592	
263	2613	1851	1895	
1648	2621	1472	1558	
3330	3333	1185	1174	
337	3419	1026	1073	
337	337	945	945	
3879	1991	912	1042	
1868	2176	867	1056	
281	2416	897	1014	
267	2390	800	930	
262	2424	705	861	
137	2164	515	512	
483	1895	416	560	
171	1625	305	460	
1914	1403	307	387	
1615	1034	188	297	
716	99	99	148	
373	356	47	72	
164	267	17	36	
119	35670	13677	15967	
			97433	

1970	WM	WP	WM	NP
	483	423	361	307
	581	521	413	358
	1366	1211	1193	1158
	1943	1862	1642	1735
	2422	2210	1666	1771
	3552	3927	3125	2059
	4552	4961	3233	2381
	5131	5961	3233	1782
	5867	1976	1329	1022
	510	1285	864	891
	349	1334	817	905
	1334	1708	772	905
	217	217	757	884
	729	1917	644	800
	1971	1602	576	744
	499	2054	419	533
	499	1858	419	533
	868	1453	306	558
	1330	1133	197	278
	330	630	106	154
	396	819	65	124
	191	479	36	84
	100	306	59	84
	503	33174	18131	16734
				113542

CAUSE	1949-50	1959-61	1969-70
TOTAL			
OBSERVED	1752.0	2758.0	3274.0
EXPECTED*	1313.9	2556.7	2836.6
OBS/EXP	1.333	1.079	1.154
CV-RENAL			
OBSERVED	890.0	1500.0	1722.0
EXPECTED*	631.0	1314.7	1490.9
OBS/EXP	1.410	1.141	1.155
HEART			
OBSERVED	582.0	1026.0	1209.0
EXPECTED*	435.1	909.8	1019.9
OBS/EXP	1.338	1.128	1.185
NON CV-R			
OBSERVED	862.0	1258.0	1552.0
EXPECTED*	682.9	1242.1	1345.7
OBS/EXP	1.262	1.013	1.153
CANCER			
OBSERVED	206.0	384.0	500.0
EXPECTED*	196.9	385.3	417.8
OBS/EXP	1.046	0.997	1.197

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS										CODE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	SOUTH CAROLINA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
CAUSE												1950 RANK BY POPULATION	129	1950 POP./SQ. MILE	6790	1970 POP./SQ. MILE	1069	1943 MED. FAM. INCOME	2665	1969 MED. FAM. INCOME	7612	URBAN CLASS	CENTRAL	1950 URBAN AREA RANK	103	JAN MEAN TEMPERATURE	47	JULY MEAN TEMPERATURE	81	MEAN ANN. PRECIPITATION	46	LAND RESOURCE REGION	P	WATER SOURCE	SURFACE	TOTAL HARDNESS	29 PPM	NON-CARBONATE HARDNESS	3 PPM	FLUORIDATION STATUS	FLUORIDATED IN 1967																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TOTAL	901	851	1752	902	926	930	2758	1109	1056	1099	3274																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	502	470	225	238	496	511	277	310	272	274	209	207
1-4	1813	1750	757	751	1811	1833	1153	1132	1073	991	891	857
5-9	1503	1494	819	787	2256	2202	1254	1282	1525	1470	1100	1081
10-14	1131	1157	698	678	1912	1957	1041	1088	1751	1784	1115	1153
15-19	1423	1930	597	691	1592	2241	817	839	2183	2479	981	1087
20-24	2353	2575	566	782	1896	2204	581	667	1843	2339	725	883
25-29	2480	2398	663	777	1234	1504	529	717	1297	1327	615	686
30-34	3259	3258	643	744	1503	1647	516	697	959	1075	413	540
35-39	1852	1955	623	714	1063	1289	512	638	1003	1114	411	533
40-44	1347	1570	641	625	1038	1281	517	594	1106	1255	411	533
45-49	1034	1254	434	510	1338	1897	519	594	1192	1354	442	536
50-54	956	1107	326	410	1139	1357	362	568	1304	1504	442	536
55-59	741	844	250	249	845	1154	316	443	1049	1307	374	438
60-64	552	727	149	198	710	1009	210	311	887	1230	269	435
65-69	451	603	154	216	573	837	218	288	573	1024	204	365
70-74	264	370	78	97	423	684	119	180	444	880	138	199
75-79#	181	349	65	94	261	459	74	116	304	632	81	149
80-84#	0	0	0	0	95	235	19	45	152	422	34	72
85-UP	32	67	18	23	48	129	24	37	86	277	44	60
TOTALS	19637	22226	7474	8624	21461	25010	9088	10629	19041	22840	8314	10413
GRAND TOTAL				58161				66188				61208

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1222.0	820.0	1.490		2036.0	1674.5	1.216		2266.0	1776.2	1.147	
CV-RENAL	574.0	366.2	1.486		1031.0	949.8	1.213		1197.0	1111.6	1.077	
HEART	397.0	267.9	1.482		694.0	586.7	1.183		765.0	758.1	1.009	
NON CV-R	648.0	433.8	1.494		1005.0	824.7	1.219		1069.0	864.6	1.236	
CANCER	141.0	251.2	1.157		284.0	294.6	1.130		311.0	1.656		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE			
	1949	1950	49-50 SUM	59-61 SUM	1949	1970	1971	69-71 SUM	STATE	1950 RANK BY POPULATION	SOUTH CAROLINA	
TOTAL	615	607	1222	2036	760	755	751	2266	1950 POP/SQ. MILE	201	3590	
CV-RENAL	278	296	574	1031	411	378	408	1197	1970 POP/SQ. MILE	2957	2957	
HEART	189	208	397	694	256	250	259	765	1949 MED. FAM. INCOME	2908	2908	
NON CV-R	337	311	648	1005	349	377	343	1069	1969 MED. FAM. INCOME	8250	8250	
CANCER	72	69	141	284	106	106	99	311	URBAN CLASS	-	INDEPENDENT	
									1950 URBAN AREA RANK	43		
									JAN MEAN TEMPERATURE	78		
									MEAN ANN. PRECIPITATION	47		
									LAND RESOURCE REGION	P		
									WATER SOURCE			
									TOTAL HARDNESS	4		
									NON-CARBONATE HARDNESS	0		
									FLUORIDATION STATUS	UNCERTAIN		

CAUSE	1949-50	1959-61	1969-71
1. <i>Unemployment</i>	10.0	10.0	10.0
2. <i>Low productivity</i>	10.0	10.0	10.0
3. <i>Low savings</i>	10.0	10.0	10.0
4. <i>Low investment</i>	10.0	10.0	10.0
5. <i>Low capital formation</i>	10.0	10.0	10.0
6. <i>Low foreign exchange</i>	10.0	10.0	10.0
7. <i>Low foreign investment</i>	10.0	10.0	10.0
8. <i>Low foreign aid</i>	10.0	10.0	10.0
9. <i>Low foreign trade</i>	10.0	10.0	10.0
10. <i>Low foreign reserves</i>	10.0	10.0	10.0
11. <i>Low foreign debt</i>	10.0	10.0	10.0
12. <i>Low foreign assets</i>	10.0	10.0	10.0
13. <i>Low foreign liabilities</i>	10.0	10.0	10.0
14. <i>Low foreign equity</i>	10.0	10.0	10.0
15. <i>Low foreign income</i>	10.0	10.0	10.0
16. <i>Low foreign expenditure</i>	10.0	10.0	10.0
17. <i>Low foreign balance of payments</i>	10.0	10.0	10.0
18. <i>Low foreign trade balance</i>	10.0	10.0	10.0
19. <i>Low foreign trade deficit</i>	10.0	10.0	10.0
20. <i>Low foreign trade surplus</i>	10.0	10.0	10.0
21. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
22. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
23. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
24. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
25. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
26. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
27. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
28. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
29. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
30. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
31. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
32. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
33. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
34. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
35. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
36. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
37. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
38. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
39. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
40. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
41. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
42. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
43. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
44. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
45. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
46. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
47. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
48. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
49. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
50. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
51. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
52. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
53. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
54. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
55. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
56. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
57. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
58. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
59. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
60. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
61. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
62. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
63. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
64. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
65. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
66. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
67. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
68. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
69. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
70. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
71. <i>Low foreign trade balance of payments</i>	10.0	10.0	10.0
72. <i>Low foreign trade balance of payments</i>	10.0	10.0	10

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS						CODE
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	
TOTAL	204	200	404	256	361	312	929	337	297	349	983	1950 BANK BY POPULATION	
CV-PNEUM	102	96	198	133	170	137	439	170	156	178	504	1950 POP/SQ. MILE	
HEART	65	66	131	81	111	88	280	108	101	121	310	1970 POP/SQ. MILE	
CIV-R	102	104	206	143	191	175	509	167	181	171	419	1949 MED. P.M. INCOME	
CANCER	25	34	63	41	39	46	126	48	50	62	160	1969 MED. P.M. INCOME	
												URBAN CLASS	
												1950 URBAN AREA BANK	
												JAN MEAN TEMPERATURE	
												JULY MEAN TEMPERATURE	
												MEAN ANN. PRECIPITATION	
												LAND RESOURCE REGION	
												G	
												WATER SOURCE	
												GROUND AND SURFACE	
												TOTAL HARDNESS	
												NON-CARBONATE HARDNESS	
												193 PPM	
												20 PPM	
												FLUORIDATION STATUS	
												NO ARTIFICIAL, LOW NATURAL	

1960	WM	WP	NM	NP
	855	784	6	9
	3299	3229	16	32
	3810	3766	27	24
	2925	2956	14	27
	2039	2559	39	20
	1824	2484	75	13
	2001	2142	47	9
	2189	2133	38	14
	2158	2184	34	15
	1969	1965	23	9
	1582	1755	23	9
	1407	1580	8	6
	1314	1459	3	3
	1185	1417	4	3
	987	1274	3	4
	719	1011	6	3
	462	591	3	0
	235	326	1	3
	139	188	3	5
	31099	33783	373	211
				65466

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

	1969	1970	1971	69-71 Sum
51				
86	623	630	624	1877
33	335	352	330	1017
99	237	243	232	712
53	288	278	294	860
92	111	114	125	350

CITY CHARACTERISTICS	CODE
STATE	SOUTH DAKOTA
1950 RANK BY POPULATION	217
1950 POP/50. MILE	4149
1970 POP/50. MILE	2900
1949 MED. FAM. INCOME	3669
1969 MED. FAM. INCOME	9617
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	14
JULY MEAN TEMPERATURE	74
MEAN ANN. PRECIPITATION	25
LAND RESOURCE REGION	M
WATER SOURCE	GROUND
TOTAL HARNESS	484 RPM
NON-CARBONATE HARDNESS	227 RPM
FLOODIGATION STATUS	NO FLOODING

NON-CARBONATE HARDNESS 227 FEE
FLUORIDATION STATUS NO ARTIFICIAL, LOW, NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	WF	NM	WF	WM	WF	NM	WF	NM	WF	WM	WF	NM	WF	NM	WF
LT 1	961	956	504	508			895	857	547	584			575	550	434	449		
1-4	3610	3523	1760	1766			3229	3156	2718	2283			2078	2041	1662	1677		
5-9	3725	3549	1617	1767			3792	3643	2718	2781			2857	2692	2391	2374		
10-14	3630	3462	1436	1487			3095	3355	2199	2192			3116	3017	2441	2368		
15-19	2917	3712	1285	1470			3080	3355	1369	1567			3124	3411	2174	2366		
20-24	3694	4498	1281	1769			2638	3187	983	1273			2913	3315	1325	1778		
25-29	3856	4286	1425	1764			2588	2825	1079	1457			2294	2352	957	1344		
30-34	3297	3657	1361	1811			2616	2909	1081	1457			1753	1690	836	1261		
35-39	3200	3693	1571	1976			2601	3148	1147	1523			1654	1874	944	1257		
40-44	3260	3643	1399	1665			2587	3026	1072	1401			2163	2704	935	1350		
45-49	2734	3209	1297	1486			2338	3026	1106	1401			2163	2704	935	1350		
50-54	2877	2712	730	1756			2253	2510	1147	1391			2032	2597	984	1243		
55-59	1873	2662	571	591			1816	2334	661	1391			2008	2661	762	1097		
60-64	1251	1599	473	565			1831	2011	603	734			1476	2408	672	742		
65-69	810	1061	197	298			1062	1539	376	435			1126	1861	941	712		
70-74	622	1092	187	275			655	1006	213	282			677	1365	258	396		
75-79	0	0	0	0			303	531	63	104			394	787	110	191		
80-84	0	0	0	0			171	314	59	96			237	523	81	162		
85-UP	94	166	36	57														
TOTALS	43036	48684	18260	21061			40539	46244	19908	23318			34892	41324	19183	23683		
GRAND TOTAL				131041					130009							119082		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR 3GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL	3031.0	4725.0	5292.0
OBSERVED	2193.6	4010.3	4466.5
EXPECTED*	1.362	1.178	1.165
OBS/EXP			
CV-RENAL	1379.0	2177.0	2811.0
OBSERVED	1098.6	2138.8	2555.3
EXPECTED*	1.255	1.018	1.100
OBS/EXP			
HEART	886.0	1324.0	2002.0
OBSERVED	761.5	1472.4	1736.9
EXPECTED*	1.163	0.899	1.153
OBS/EXP			
NON CV-R	1652.0	2548.0	2481.0
OBSERVED	1095.0	1871.5	1911.2
EXPECTED*	1.509	1.361	1.298
OBS/EXP			
CANCER	336.0	649.0	857.0
OBSERVED	335.1	612.5	667.8
EXPECTED*	1.003	1.060	1.283
OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949	1950	1959	1960	1961	1969	1970	1971	69-71 SUM
TOTAL	1518	1513	1490	1595	1640	1739	1803	1750	5292
CV-RENAL	657	722	709	729	739	924	978	909	2811
HEART	416	470	430	471	423	666	702	634	2002
NON CV-R	861	791	781	866	901	825	825	841	2481
CANCER	182	154	208	205	236	257	294	306	857

STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
TENNESSEE	73	4680	2268	2444	7114	CENTRAL	75	41	78	53	N	SURFACE	59 PPM	29 PPM	FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NP
IT 1	189	174	118	115
1-4	768	739	445	457
5-9	705	627	412	437
10-14	583	547	335	389
15-19	627	759	303	402
20-24	814	962	428	560
25-29	831	890	393	441
30-34	703	773	322	408
35-39	739	753	371	435
40-44	633	798	325	430
45-49	616	690	318	364
50-54	482	597	269	312
55-59	473	536	213	221
60-64	395	522	155	154
65-69	389	442	156	204
70-74	262	337	98	109
75-79	232	271	64	84
80-84	0	0	0	0
85-Up	28	56	20	18
TOTALS	9459	10423	4785	5540
GRAND TOTAL				30207

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE		1949-50	1959-61	1969-71
TOTAL	OBSERVED	689.0	1159.0	1502.0
	EXPECTED*	606.3	1274.1	1630.7
	OBS/EXP	1.136	0.910	0.921
CVU-RENAL	OBSERVED	328.0	642.0	896.0
	EXPECTED*	321.4	717.7	962.6
	OBS/EXP	1.021	0.895	0.931
HEART	OBSERVED	203.0	388.0	551.0
	EXPECTED*	221.1	487.9	647.3
	OBS/EXP	0.918	0.795	0.851
NON CV-R	OBSERVED	361.0	517.0	606.0
	EXPECTED*	285.0	556.4	668.1
	OBS/EXP	1.267	0.929	0.907
CANCER	OBSERVED	85.0	160.0	223.0
	EXPECTED*	92.3	187.1	231.5
	OBS/EXP	0.921	0.855	0.963

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SDR	1959	1960	1961	59-61 SDR	1969	1970	1971	69-71 SDR
TOTAL	368	321	689	380	402	377	1159	490	504	508	1502
CV-RENAL	182	146	328	201	237	204	382	300	293	303	896
HYPERT	113	90	203	115	144	129	388	180	178	193	551
NON CV-R	186	175	361	179	165	173	361	190	211	205	606
CANCER	46	39	85	58	65	57	160	89	89	75	223

CITY CHARACTERISTICS

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	234	243	19	28	276	264	19	32	221	188	21	22
1-4	1059	962	102	98	1039	964	85	86	928	771	96	101
5-9	923	966	118	85	1175	1168	103	100	1203	1140	145	137
10-14	762	831	92	100	963	1130	94	92	1252	1296	140	146
15-19	834	993	86	92	1098	1245	88	65	1663	1740	138	148
20-24	1076	1296	70	90	1028	1062	33	61	1701	1593	94	109
25-29	1095	1140	73	65	773	809	39	52	899	836	60	69
30-34	911	964	63	92	808	903	39	57	659	768	31	56
35-39	839	903	64	96	924	998	52	51	724	815	43	58
40-44	813	829	79	79	862	857	64	69	856	975	43	73
45-49	709	735	74	67	703	807	63	80	1025	1046	67	61
50-54	1120	606	161	84	790	770	66	62	1057	863	74	60
55-59	1145	480	188	56	618	679	59	70	863	841	53	65
60-64	730	367	119	35	1096	545	122	47	788	755	43	59
65-69	378	366	50	39	864	466	145	48	517	676	44	61
70-74	298	220	19	21	457	345	48	27	580	504	57	45
75-79*	211	200	11	24	216	271	16	13	423	381	45	29
80-84*	0	0	0	0	133	125	9	12	162	229	21	14
85-89*	40	36	3	6	65	86	3	8	132	207	9	17
TOTALS	13177	12137	1393	1157	14219	13494	1147	1032	15593	15624	1232	1321
GRAND TOTAL				27864				29892				33770

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	466.0	489.9	0.951		924.0	991.2	0.932		1179.0	1250.1	0.943	
CV-RENAL	237.0	260.3	0.910		501.0	558.7	0.897		705.0	745.8	0.945	
HEART	146.0	189.5	0.771		336.0	400.8	0.838		503.0	521.3	0.965	
NON CV-R	229.0	229.6	0.997		423.0	432.5	0.978		474.0	504.2	0.940	
CANCER	58.0	80.8	0.718		140.0	161.1	0.869		180.0	191.3	0.941	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50 SUM	59-61 SUM	1959	1960	1961	1969	
TOTAL	230	236	466	591	320	292	312	378	69-71 SUM
CV-RENAL	107	130	237	237	171	158	172	233	1971
HEART	73	73	146	146	111	108	117	167	417
NON CV-R	123	106	229	229	149	134	140	145	417
CANCER	28	30	58	58	61	37	42	52	180

TENNESSEE			
STATE	1950 RANK BY POPULATION	440	
1950 POP/50. MILE	1970 POP/50. MILE	4287	
1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	2746	
URBAN CLASS	1950 URBAN AREA RANK	7620	
JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	-	34
MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	77	44
WATER SOURCE	TOTAL HARDNESS	N	57 PPM
NON-CARBONATE HARDNESS	FLUORIDATION STATUS	3 PPM	FLUORIDATED IN 1961

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970				CAUSE
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	
TOTALS	50141	55406	9043	10179	42383	48558	9605	11281	71563	80248	10334	12442	TOTAL
GRAND TOTAL				124769				111827				174587	
1-4	1057	1048	222	212	905	892	297	273	1117	1082	222	197	HEART
5-9	4285	4270	784	804	3364	3058	1042	1085	3911	3772	884	849	HEART
10-14	4181	4247	759	759	3809	3745	1114	1143	5799	5503	1138	1145	HEART
15-19	3644	3601	671	738	3867	3778	978	1040	6271	6116	1262	1294	HEART
20-24	3841	4384	669	693	3836	4380	791	866	8185	8168	1199	1339	HEART
25-29	5303	5766	668	905	3780	4013	547	762	9113	8931	959	1227	HEART
30-34	5025	5178	723	909	2804	2865	477	600	5021	4916	576	668	HEART
35-39	3836	4204	735	857	2445	2886	512	716	3481	3670	376	617	HEART
40-44	3610	4049	787	951	2609	3147	584	770	3345	4032	415	539	HEART
45-49	3269	3833	648	809	2470	3020	568	794	4022	4805	425	687	HEART
50-54	3019	3469	655	703	2539	3067	617	731	4374	5139	472	672	HEART
55-59	2582	2880	571	573	2431	3024	564	643	3931	4717	530	723	HEART
60-64	1900	2436	347	372	2249	2809	473	541	3616	4499	509	629	HEART
65-69	1574	1938	281	290	1752	2367	333	416	3038	4183	430	577	HEART
70-74	1371	1671	252	313	1340	2008	313	358	2469	3678	380	495	HEART
75-79	845	1135	142	149	1029	1558	190	250	1780	2873	259	348	HEART
80-84	698	1131	118	124	673	1028	121	153	1063	2060	159	207	HEART
85-UP	0	0	0	0	309	521	42	69	625	1290	90	128	HEART
TOTALS	50141	55406	9043	10179	42383	48558	9605	11281	71563	80248	10334	12442	HEART
GRAND TOTAL				124769				111827				174587	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	2486.0	1901.7	1.307	3746.0	3346.9	1.119	5400.0	5664.2	0.953
CV-RENAL	1219.0	970.1	1.257	1884.0	1829.8	1.030	2631.0	3272.8	0.804
HEART	808.0	684.1	1.181	1200.0	1278.4	0.942	1841.0	2271.7	0.810
NON CV-R	1267.0	931.6	1.360	1862.0	1517.1	1.227	2769.0	2391.8	1.158
CANCER	309.0	302.2	1.023	547.0	521.1	1.050	928.0	878.2	1.057

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	
TOTAL	1229	1257	2486	3746	1837	1789	1774	5400	TENNESSEE
CV-RENAL	581	638	1219	1884	900	841	890	2601	1950 POP/SQ. MILE
HEART	373	435	808	1262	658	571	612	1841	1970 POP/SQ. MILE
NON CV-R	648	619	1267	1862	937	948	884	2769	1949 MED. FAM. INCOME
CANCER	141	168	309	547	284	324	320	928	1969 MED. FAM. INCOME
									URBAN CLASS
									1950 URBAN AREA
									JAN MEAN TEMPERATURE
									JULY MEAN TEMPERATURE
									MEAN ANN. PRECIPITATION
									LAND RESOURCE REGION
									WATER SOURCE
									TOTAL HARDNESS
									NON-CARBONATE HARDNESS
									FLUORIDATION STATUS
									NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
1-4	2723	2695	1858	2001	3372	3265	2777	2864
5-9	10695	10550	6752	6680	13571	12939	11206	12235
10-14	9442	9079	6153	6586	15748	15276	12060	12355
15-19	6743	6691	5776	5529	13801	13831	9168	9328
20-24	6541	6438	4556	5684	9952	11516	5974	6748
25-29	10768	13252	5320	5938	9381	11917	4492	6168
30-34	12467	13561	5528	5804	10140	11534	4803	6190
35-39	10895	11252	4862	6002	11397	12408	4857	6467
40-44	9737	10391	5329	6671	11732	12707	4899	5662
45-49	8646	9503	4989	5839	10227	10960	4481	5525
50-54	7275	7913	4710	5172	9163	10060	4553	5673
55-59	6136	6960	4085	4312	7272	7868	3932	4934
60-64	5236	5712	3480	3880	6375	7084	3247	4347
65-69	4293	4632	2414	3011	5865	6564	2947	3347
70-74	2931	3836	2002	2411	4687	5565	2747	3841
75-79*	1923	2836	1131	1321	2954	4237	1767	2055
80-84*	1622	2736	967	1150	1706	2852	1081	1228
85-UP	235	477	159	263	819	1636	477	577
TOTALS	118181	130532	68870	78417	147856	164943	86496	98229
GRAND TOTAL				396000				497524

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	7376.0	6798.0	1.085		13957.0	13854.3	1.007		17163.0	18175.4	0.944	
CV-RENAL	3390.0	6948.0	0.489		8949.0				8949.0			
HEART	365.5	7088.8	0.052		7088.8				7088.8			
	1.007	0.980			0.980				0.914			
NON CV-R	3986.0	7009.0	0.569		8214.0				8214.0			
	3432.5	6765.9	0.507		8386.6				8386.6			
	1.161	1.036			0.979				0.979			
CANCER	905.0	2139.0	0.423		2959.0				2959.0			
	1001.1	2017.3	0.496		2626.8				2626.8			
	0.904	1.060			1.126				1.126			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

CAUSE	1949-50				1959-61				1969-71			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	3590	3786	7376	78417	4616	4664	4677	13957	5528	5835	5800	17163
CV-RENAL	1622	1768	3390	39600	2354	2313	2281	6948	2872	3075	3075	8949
HEART	1036	1169	2205	2405	1453	1396	1303	4152	1861	2009	2147	6017
NON CV-R	1968	2018	3986	4550	2262	2351	2396	7009	2656	2725	2725	8214
CANCER	455	450	905	905	681	688	770	2139	933	1025	1001	2959
STATE	1950 RANK BY POPULATION				1960 RANK BY POPULATION				1970 RANK BY POPULATION			
26	1950 POP/SQ. MILE				1960 POP/SQ. MILE				1970 POP/SQ. MILE			
3800	1950 MED. FAM. INCOME				1960 MED. FAM. INCOME				1970 MED. FAM. INCOME			
2868	1950 URBAN CLASS				1960 URBAN CLASS				1970 URBAN CLASS			
2859	1950 JURY MEAN TEMPERATURE				1960 JURY MEAN TEMPERATURE				1970 JURY MEAN TEMPERATURE			
8646	1950 JAN. PRECIPITATION				1960 JAN. PRECIPITATION				1970 JAN. PRECIPITATION			
CENTRAL	1950 LAND RESOURCE REGION				1960 LAND RESOURCE REGION				1970 LAND RESOURCE REGION			
34	1950 WATER SOURCE				1960 WATER SOURCE				1970 WATER SOURCE			
41	1950 TOTAL HARDNESS				1960 TOTAL HARDNESS				1970 TOTAL HARDNESS			
41	1950 NON-CARBONATE HARDNESS				1960 NON-CARBONATE HARDNESS				1970 NON-CARBONATE HARDNESS			
81	1950 FLUORIDATION STATUS				1960 FLUORIDATION STATUS				1970 FLUORIDATION STATUS			
0	1950 NO ARTIFICIAL, LOW NATURAL				1960 NO ARTIFICIAL, LOW NATURAL				1970 NO ARTIFICIAL, LOW NATURAL			
0	1950 GROUND				1960 GROUND				1970 GROUND			
38 PPM	1950				1960				1970			
0 PPM	1950				1960				1970			
NO ARTIFICIAL, LOW NATURAL	1950				1960				1970			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					1970	1971	69-71 SUM	CITY CHARACTERISTICS	CODE
	1950	1959	1960	1961	59-61 SUM					
CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	69-71 SUM	STATE	TENNESSEE
TOTAL	2226	2286	4512	2151	2232	2311	6694	12800	1950 BANK BY POPULATION	56
CV-RENAL	1031	1070	2101	1178	1274	1308	3760	6458	1950 POP/SQ. MILE	7923
HEART	627	695	1322	756	845	863	2464	4112	1970 POP/SQ. MILE	882
NON CV-R	1195	1216	2411	973	958	1003	2934	2157	1969 MED. FAN. INCOME	2446
CANCER	282	268	550	294	283	310	887	1486	1969 MED. FAN. INCOME	9473
								1891	URBAN CLASS	CENTRAL
								628	1950 URBAN AREA RANK	48
								662	JAN MEAN TEMPERATURE	39
									JULY MEAN TEMPERATURE	80
									MEAN ANN. PRECIPITATION	45
									LAND RESOURCE REGION	N
									WATER SOURCE	SURFACE
									TOTAL HARDNESS	90 PPM
									NON-CARBONATE HARDNESS	24 PPM
									FLUORIDATION STATUS	FLUORIDATED

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	477	507	35	23	1225	1204	63	79	764	771	67	85
1-4	1912	1883	74	95	4390	4163	270	250	2780	2574	272	242
5-9	1824	1734	101	102	4527	4353	268	285	3959	3929	340	392
10-14	1416	1301	91	79	3664	3556	211	194	4283	4032	367	353
15-19	1796	2320	77	84	3549	3879	210	179	4225	4459	265	292
20-24	2359	2468	77	94	4885	4150	277	183	5060	4586	389	242
25-29	2002	2010	101	118	3681	3321	245	218	2715	2641	182	204
30-34	1707	1659	87	101	3055	3086	159	163	2217	2572	163	193
35-39	1512	1559	77	96	3129	2959	135	145	2389	2464	174	173
40-44	1337	1345	76	71	2505	2401	115	94	2138	2398	99	156
45-49	1151	1256	83	95	2062	2150	108	123	2223	2383	96	123
50-54	1029	1089	66	61	1782	1773	79	96	1886	2137	82	92
55-59	793	845	51	48	1330	1573	61	79	1704	2025	89	104
60-64	634	691	33	22	1050	1309	55	53	1451	1733	72	74
65-69	489	610	23	23	806	1049	44	41	1161	1557	46	78
70-74	342	439	15	15	616	805	24	24	827	1175	41	47
75-79*	310	398	14	13	359	578	12	16	503	832	19	32
80-84*	0	0	0	0	213	322	11	6	296	520	12	13
85-UP	57	81	4	3	119	199	7	9	186	410	7	11
TOTALS	21147	22195	1085	1143	42947	42830	2354	2237	40767	43198	2782	2906
GRAND TOTAL				45570			90368					89653

* AS RECORDED IN 1956 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	662.0	656.9	1.008		1516.0	1876.6	0.808		2007.0	2414.3	0.831	
CV-RENAL	293.0	337.0	0.867		694.0	942.4	0.736		973.0	1354.1	0.719	
HEART	219.0	241.3	0.908		475.0	668.8	0.710		665.0	950.1	0.700	
NON CV-R	369.0	319.0	1.157		822.0	934.2	0.880		1034.0	1066.2	0.975	
CANCER	99.0	103.8	0.954		252.0	282.4	0.891		347.0	376.4	0.937	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE		TEXAS	
	STATE	1960	RANK BY POPULATION	25857
1950 POP/50. MILE	1950	POP/50. MILE	1950	POP/50. MILE
1970 POP/50. MILE	1970	POP/50. MILE	1970	POP/50. MILE
1949 MED. FAM. INCOME	1949	MED. FAM. INCOME	1949	MED. FAM. INCOME
1959 MED. FAM. INCOME	1959	MED. FAM. INCOME	1959	MED. FAM. INCOME
URBAN CLASS	URBAN	CLASS	URBAN	CLASS
1950 URBAN AREA RANK	1950	URBAN AREA RANK	1950	URBAN AREA RANK
JAN MEAN TEMPERATURE	JAN	MEAN TEMPERATURE	JAN	MEAN TEMPERATURE
JULY MEAN TEMPERATURE	JULY	MEAN TEMPERATURE	JULY	MEAN TEMPERATURE
MEAN ANN. PRECIPITATION	MEAN	ANN. PRECIPITATION	MEAN	ANN. PRECIPITATION
LAND RESOURCE REGION	LAND	RESOURCE REGION	LAND	RESOURCE REGION
WATER SOURCE	WATER	SOURCE	WATER	SOURCE
TOTAL HARDNESS	TOTAL	HARDNESS	TOTAL	HARDNESS
NON-CARBONATE HARDNESS	NON-CARBONATE	HARDNESS	NON-CARBONATE	HARDNESS
FLUORIDE STATUS	FLUORIDE	STATUS	FLUORIDE	STATUS
NO ARTIFICIAL, LOW NATURAL	NO	ARTIFICIAL, LOW NATURAL	NO	ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE 1949-50 1959-61 1969-71

CAUSE	1949-50	1959-61	1969-71
TOTAL	1110.0	2578.0	3216.0
OBSERVED	979.6	2717.0	3387.3
EXPECTED*	1.133	0.949	0.949
OBS/EXP			
CV-RENAL	442.0	1260.0	1648.0
OBSERVED	483.6	1337.4	1878.9
EXPECTED*	0.914	0.942	0.877
OBS/EXP			
HEART	322.0	869.0	1144.0
OBSERVED	349.9	966.1	1329.3
EXPECTED*	0.920	0.905	0.861
OBS/EXP			
NON CV-R	668.0	1318.0	1568.0
OBSERVED	496.0	1379.6	1508.4
EXPECTED*	1.347	0.955	1.040
OBS/EXP			
CANCER	146.0	358.0	519.0
OBSERVED	159.2	425.1	537.4
EXPECTED*	0.917	0.842	0.966
OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	TEXAS
1950 RANK BY POPULATION	155
1950 POP/SQ. MILE	3552
1970 POP/SQ. MILE	2092
1949 MED. FAM. INCOME	3653
1969 MED. FAM. INCOME	8867
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	148
JAN MEAN TEMPERATURE	35
JULY MEAN TEMPERATURE	77
MEAN ANN. PRECIPITATION	21
LAND RESOURCE REGION	H
WATER SOURCE	GROUND
TOTAL HARDNESS	254 PPM
NON-CARBONATE HARDNESS	8 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, HIGH NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

1960

AGE GROUP	WM	WF	NM	NF
1-4	837	1700	152	131
5-9	3268	6339	636	465
10-14	3067	7332	479	512
15-19	2358	5709	5659	320
20-24	2772	7597	648	252
25-29	3277	5212	4843	425
30-34	3045	5194	4928	286
35-39	2801	4983	4881	268
40-44	2526	4800	4629	213
45-49	2258	4097	3913	205
50-54	1877	3458	3486	195
55-59	1389	2789	2988	177
60-64	1057	2388	2554	117
65-69	726	1794	1892	101
70-74	448	1281	1527	60
75-79*	397	893	1111	51
80-84*	0	497	742	19
85-up	61	240	389	7
TOTALS	34511	66642	63298	4215
GRAND TOTAL	1751	1904	3814	137969
				74246

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	1959	1960	1961	59-61	69-71
TOTAL	548	562	1110	895	879	2578	3216
CV-RENAL	206	236	384	438	438	1260	1648
HEART	151	171	322	313	301	869	1144
NON CV-R	342	326	420	457	441	1318	1568
CANCER	74	72	125	118	115	358	519

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	1358	1278	194	197	2003	1893	346	308	2145	1984	380	362
1-4	4949	4767	723	686	7318	6961	1239	1201	7126	6755	1386	1398
5-9	4354	4237	655	641	7805	7676	1435	1417	9548	9398	1810	1853
10-14	3300	3234	566	556	7100	6723	1279	1190	9576	9161	1849	1831
15-19	4529	4941	716	985	7687	7838	948	1075	12053	12330	1662	1670
20-24	8165	7035	812	1034	9589	8382	788	914	18658	17719	1359	1619
25-29	6712	5718	821	837	6327	5451	801	905	10036	8853	1041	1175
30-34	4524	4230	532	701	4892	5059	697	883	6294	6202	815	969
35-39	3752	4231	554	753	4913	5141	682	841	5363	5423	883	931
40-44	3352	3686	574	674	4314	4676	543	751	5041	5530	729	968
45-49	2812	3043	478	587	4186	4613	604	756	5028	5566	672	830
50-54	2315	2747	375	548	3635	4082	602	665	4399	4888	574	694
55-59	1949	2363	331	382	2945	3343	442	611	3831	4489	494	691
60-64	1646	2056	246	329	2454	2818	321	491	3073	3938	499	594
65-69	1291	1639	226	362	1847	2425	339	423	2254	3075	331	543
70-74	884	1147	138	195	1448	1984	214	329	1572	2453	228	363
75-79#	827	1170	128	190	932	1407	149	204	946	1787	198	285
80-84#	0	0	0	0	506	797	70	113	623	1225	99	179
85-UP	144	267	24	57	284	552	67	96	408	859	98	137
TOTALS	56863	57789	8093	9714	79985	81821	11566	13173	107974	111635	15107	17092
GRAND TOTAL				132459				186545				251808

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND CENSUS RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1884.0	2037.4	0.925		3928.0	4736.5	0.829		4974.0	6038.6	0.824	
CV-RENAL												
OBSERVED	866.0	1049.2	0.825		1947.0	2520.2	0.773		2397.0	3258.7	0.736	
HEART												
OBSERVED	568.0	733.1	0.775		1308.0	1753.1	0.746		1665.0	2253.8	0.739	
NON CV-R												
OBSERVED	1018.0	988.1	1.030		1981.0	2216.4	0.894		2577.0	2779.5	0.927	
CANCER												
OBSERVED	247.0	309.7	0.798		654.0	706.3	0.926		846.0	889.7	0.951	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1959				1969				1971			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	982	902	1884	1289	1316	1323	3928	1641	1615	1718	4974	4974	1718	4974	4974	4974
CV-RENAL	436	430	866	666	627	654	1947	791	791	854	2397	2397	854	2397	2397	2397
HEART	270	238	568	450	424	434	1308	521	521	569	1665	1665	575	1665	1665	1665
NON CV-R	546	472	1018	623	689	669	1981	850	863	864	2577	2577	864	2577	2577	2577
CANCER	118	129	247	207	215	232	654	263	286	297	846	846	297	846	846	846

CITY CHARACTERISTICS

STATE	TEXAS	
	72	72
1950 RANK BY POPULATION	4126	4126
1950 POP/50. MILE	3492	3492
1970 POP/50. MILE	3098	3098
1949 MED. FAM. INCOME	9180	9180
1969 MED. FAM. INCOME	CENTRAL	CENTRAL
URBAN CLASS	91	91
1950 URBAN AREA RANK	49	49
JAN MEAN TEMPERATURE	84	84
JULY MEAN TEMPERATURE	35	35
MEAN ANN. PRECIPITATION	J	J
LAND RESOURCE REGION	SURFACE	SURFACE
WATER SOURCE	85 PEM	85 PEM
TOTAL HARDNESS	38 PEM	38 PEM
NON-CARBONATE HARDNESS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL
FLUORIDATION STATUS		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT 1	789	733	351	380
5-9	2988	2843	1400	1222
10-14	2806	2742	1353	1347
15-19	2243	2094	1115	1077
20-24	2035	2293	964	1555
25-29	2524	3101	1068	1343
30-34	3159	3273	1059	1312
35-39	2772	2879	958	1184
40-44	2716	2811	949	1183
45-49	2636	2710	916	977
50-54	2194	2081	851	852
55-59	1826	1668	671	634
60-64	1292	1307	488	450
65-69	1017	1052	367	323
70-74	736	892	367	391
75-79	458	603	158	162
80-84	397	532	154	136
85-up	71	106	0	42
TOTALS	32669	33720	13255	14400
GRAND TOTAL				94074

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	1605.0	2942.0	3319.0
EXPECTED*	1421.5	3049.5	3539.8
OBS/EXP	1.129	0.965	0.938
CV-RENAL			
OBSERVED	694.0	1556.0	1706.0
EXPECTED*	685.0	1545.6	1949.4
OBS/EXP	1.013	1.007	0.875
HEART			
OBSERVED	480.0	1027.0	1166.0
EXPECTED*	476.2	1072.1	1386.9
OBS/EXP	1.008	0.958	0.872
NON CV-R			
OBSERVED	911.0	1386.0	1613.0
EXPECTED*	736.5	1590.3	1590.3
OBS/EXP	1.237	0.922	1.014
CANCER			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM
TOTAL	783	822	1605	951	1013	978	2942
CV-PENAL	338	356	694	359	537	510	1556
HEART	236	244	480	338	357	332	1027
NON CV-R	445	466	911	412	476	468	1386
CANCER	101	106	207	113	161	174	478

CITY CHARACTERISTICS

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	560	517	1	1	776	761	2	1
1-4	2186	2135	9	1	2922	2759	9	5
5-9	2070	2099	5	5	3424	3458	8	10
10-14	1729	1720	3	3	2839	2884	10	7
15-19	1340	1578	3	2	1909	2162	1	5
20-24	1396	1740	2	10	1072	1670	3	5
25-29	1471	1573	6	2	1241	1656	1	2
30-34	1174	1309	1	8	1409	1793	7	7
35-39	1244	1357	6	12	1320	1606	12	6
40-44	1090	1063	10	4	1091	1295	5	4
45-49	904	897	3	4	1081	1297	7	10
50-54	623	659	3	4	927	1014	13	1
55-59	435	536	6	5	766	898	6	2
60-64	408	430	5	5	545	665	5	4
65-69	333	401	2	4	427	561	4	3
70-74	179	289	1	3	336	398	4	2
75-79*	185	213	3	0	226	305	0	0
80-84*	0	0	0	0	91	154	0	0
85-UP	27	61	0	1	41	89	1	0
TOTALS	17354	18577	68	67	22443	25425	98	74
GRAND TOTAL			36	66				48040

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*
TOTAL	724.0	417.9	1081.0	921.5	1189.0	1248.5
		1.732		1.173		0.552
CV-RENAL	206.0	198.5	454.0	453.0	501.0	687.7
		1.038		1.002		0.729
HEART	151.0	142.9	322.0	325.4	353.0	486.5
		1.057		0.990		0.726
NON CV-R	518.0	219.4	627.0	468.5	688.0	560.7
		2.361		1.338		1.227
CANCER	51.0	64.0	133.0	142.8	182.0	194.9
		0.796		0.932		0.934

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959				1961				50-61			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	373	351	724	351	354	356	371	1081	391	392	406	1189	391	392	406	1189
CV-RENAL	100	106	206	153	153	144	157	454	151	158	192	501	151	158	192	501
HEART	77	74	151	118	118	96	108	322	109	108	136	353	109	108	136	353
NON CV-R	273	245	518	245	201	212	214	627	240	234	214	688	240	234	214	688
CANCER	23	28	51	55	34	44	55	133	57	64	61	182	57	64	61	182

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION		1950 RANK BY POPULATION		1950 RANK BY POPULATION	
	TEXAS	332	TEXAS	332	TEXAS	332
1950 POP/50. MILE	3680	3680	1970 POP/50. MILE	3455	1970 POP/50. MILE	3455
1949 MED. FAM. INCOME	2076	2076	1949 MED. FAM. INCOME	2076	1949 MED. FAM. INCOME	2076
URBAN CLASS	4894	4894	URBAN CLASS	4894	URBAN CLASS	4894
1950 URBAN AREA RANK	-	-	1950 URBAN AREA RANK	-	1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	60	60	JAN MEAN TEMPERATURE	60	JAN MEAN TEMPERATURE	60
JULY MEAN TEMPERATURE	83	83	JULY MEAN TEMPERATURE	83	JULY MEAN TEMPERATURE	83
MEAN ANN. PRECIPITATION	29	29	MEAN ANN. PRECIPITATION	29	MEAN ANN. PRECIPITATION	29
LAND RESOURCE REGION	I	I	LAND RESOURCE REGION	I	LAND RESOURCE REGION	I
WATER SOURCE	266 PPM	266 PPM	WATER SOURCE	266 PPM	WATER SOURCE	266 PPM
TOTAL HARDNESS	153 PPM	153 PPM	TOTAL HARDNESS	153 PPM	TOTAL HARDNESS	153 PPM
NON-CARBONATE HARDNESS	153 PPM	153 PPM	NON-CARBONATE HARDNESS	153 PPM	NON-CARBONATE HARDNESS	153 PPM
FLUORIDATION STATUS	NO ARTIFICIAL	NO ARTIFICIAL	FLUORIDATION STATUS	NO ARTIFICIAL	FLUORIDATION STATUS	NO ARTIFICIAL

GROUND AND SURFACE

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	49939	51184	3450	3714	77419	80944	4448	4879
GRAND TOTAL				108287				167690

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950		49-50		59-61	
		1949	1950	SUM	1969	1970	1971
TOTAL	722	695	1417	972	1397	1453	1499
CV-RENAL	272	251	523	458	483	556	672
HEART	192	183	375	341	531	497	518
NON CV-R	450	444	894	514	722	797	827
CANCER	90	86	176	159	244	234	279

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	TOTAL	1949-50		1959-61		1969-71	
		OBSERVED	EXPECTED*	OBS/EXP	1949-50	1959-61	1969-71
TOTAL		1417.0	3066.0	1.191	1417.0	3066.0	4349.0
CV-RENAL		523.0	1393.0	0.986	523.0	1393.0	2003.0
HEART		375.0	1056.0	0.985	375.0	1056.0	1546.0
NON CV-R		894.0	1673.0	0.970	894.0	1673.0	2346.0
CANCER		176.0	509.0	0.955	176.0	509.0	757.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	TEXAS
1950 RANK BY POPULATION	57
1950 POP./SQ. MILE	5037
1970 POP./SQ. MILE	2033
1949 MED. FAM. INCOME	3187
1969 MED. FAM. INCOME	8468
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	101
JAN MEAN TEMPERATURE	55
JULY MEAN TEMPERATURE	82
MEAN ANN. PRECIPITATION	28
LAND RESOURCE REGION	T
WATER SOURCE	SURFACE
TOTAL HARDNESS	114 PPM
NON-CARBONATE HARDNESS	36 PPM
FLUORIDATION STATUS	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	4397	4193	625	657	6163	5929	2348	2259	5660	5322	2691	2676
1-4	16246	15432	2166	2171	23986	23174	8200	8098	20357	19297	10821	10668
5-9	14031	13894	2074	2155	28408	27109	7953	8052	27682	26347	14534	14480
10-14	10487	10351	1628	1743	24553	23935	5815	5859	28313	27567	13077	12985
15-19	9591	11800	1660	1716	16498	18489	4123	4587	25440	26387	9893	10845
20-24	14375	18514	2333	2875	15360	19011	4259	5274	25343	31687	8630	11909
25-29	18628	20505	2422	2951	17992	18872	4686	5674	25721	25136	8363	9532
30-34	17035	17567	2223	2698	19567	21271	4625	5421	19241	18489	6530	7395
35-39	15593	17035	2353	2873	21184	22821	4194	4787	17420	17788	5715	6673
40-44	14148	14861	2131	2492	19197	20030	3496	3863	18924	20574	5104	6008
45-49	11839	13038	2106	2246	17452	18793	3261	3585	20039	22175	4382	4808
50-54	9957	10720	1784	1614	14922	16104	2742	3023	17667	19025	3501	4099
55-59	8048	8758	1215	1664	12464	14156	2340	2512	14898	17406	3005	3532
60-64	6022	6861	866	785	9191	11086	1699	1796	12105	14769	2440	3042
65-69	4058	5515	759	901	7008	9090	1338	1489	8478	12218	1996	2454
70-74	2707	3837	427	438	4719	6779	902	960	5660	9170	1333	1616
75-79*	2385	3753	350	389	2694	4397	499	570	3569	6670	749	939
80-84*	0	0	0	0	1322	2460	256	275	1879	3972	390	506
85-89*	342	676	54	79	674	1613	179	212	1095	2737	341	492
TOTALS	179689	197310	27116	30147	263354	285119	62915	68296	299511	326736	103495	114659
GRAND TOTAL				434462				679684				844401

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	6959.0	15945.0	15945.0		6959.4	16868.2	22617.1		6959.4	16868.2	22617.1	
			1.055				0.945				0.952	
CV-RENAL	3379.0	7811.0	7811.0		3379.4	8066.7	12080.8		3379.4	8066.7	12080.8	
			1.014				0.908				0.851	
HEART	2347.0	5335.0	5335.0		2347.0	5335.0	7368.0		2347.0	5335.0	7368.0	
			0.994				0.881				0.879	
NON CV-R	3580.0	8134.0	8134.0		3580.0	8134.0	11253.0		3580.0	8134.0	11253.0	
			1.037				0.985				1.068	
CANCER	990.0	2688.0	2688.0		990.0	2688.0	3581.0		990.0	2688.0	3581.0	
			0.942				1.035				1.049	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	TEXAS
1950 RANK BY POPULATION	22
1950 POP/SQ. MILE	3879
1970 POP/SQ. MILE	3179
1949 MED. FAM. INCOME	3526
1969 MED. FAM. INCOME	10019
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	22
JAN MEAN TEMPERATURE	45
JULY MEAN TEMPERATURE	85
MEAN ANN. PRECIPITATION	34
LAND RESOURCE REGION	J
WATER SOURCE	SURFACE
TOTAL HARDNESS	66 PPM
NON-CARBONATE HARDNESS	33 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1966

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NF	WM	WF	NH	NF
IT 1	1760	1766	27	30	4497	4309	182	159
1-4	6652	6350	131	163	15391	15879	482	475
5-9	6137	6049	146	168	17501	17853	487	459
10-14	4822	5045	104	108	13772	13858	317	295
15-19	4832	5174	114	126	9568	10595	245	226
20-24	4832	5174	114	126	9568	10595	245	226
25-29	5935	6299	202	188	9958	10980	356	329
30-34	5065	5670	156	181	9971	10817	299	379
35-39	4093	4649	157	145	9360	9906	244	290
40-44	3608	4005	129	120	7608	7553	195	178
45-49	3160	3627	93	104	5894	6261	155	128
50-54	2625	2911	96	78	4673	5336	125	98
55-59	2219	2535	60	53	3882	4428	84	92
60-64	1815	2059	67	46	2794	3358	61	60
65-69	1295	1627	51	48	2261	2813	45	48
70-74	856	1021	43	28	1712	2210	51	48
75-79*	708	1034	31	30	977	1293	32	25
80-84*	0	0	0	0	419	768	17	8
85-UP	134	207	5	8	245	423	10	6
TOTALS	61438	65595	1694	1758	131007	138256	3684	3740
GRAND TOTAL				130485				276687

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THP 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61			
	WM	WF	NH	NF	WM	WF	NH	NF
CV-RENAL	1150	1214	2364	2364	1695	1811	1760	5266
HEART	402	369	571	571	688	688	688	1263
NON CV-R	218	368	571	571	323	503	503	901
CANCER	160	153	313	313	1093	1123	1106	336

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	2364.0	2366.0	1.004		5266.0	6205.0	0.849	
CV-RENAL	871.0	1963.0	0.444		2482.0	3479.4	0.713	
HEART	588.0	1236.0	0.476		1660.0	2472.7	0.671	
NON CV-R	1493.0	3303.0	0.452		3723.0	3178.4	1.171	
CANCER	313.0	706.0	0.443		976.0	1040.1	0.938	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CITY CHARACTERISTICS	CODE
STATE	TEXAS
1950 POP/50. MILE	75
1960 POP/50. MILE	5097
1970 POP/50. MILE	2724
1949 MED. FAM. INCOME	3109
1969 MED. FAM. INCOME	7963
URBAN CLASS.	CENTRAL
1950 URBAN AREA RANK	90
JAN MEAN TEMPERATURE	43
JULY MEAN TEMPERATURE	81
MEAN ANN. PRECIPITATION	7
LAND RESOURCE REGION	D
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	146 PPM
NON-CARBONATE HARDNESS	69 PPM
FLUORIDATION STATUS	NO ARTIFICIAL/OPTIMUM NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	2591	2655	428	458	3322	3165	907	884	2924	2876	935	970
1-4	10432	9980	1466	1597	13065	12665	3462	3393	10277	10073	3966	3701
5-9	9500	9225	1444	1478	15229	14396	3654	3620	13665	13097	5170	4902
10-14	7045	7120	1225	1240	13162	12840	2512	2697	13738	13435	5057	4926
15-19	7100	8124	1130	1273	9652	10953	1757	1904	13465	13886	3944	4198
20-24	10497	11486	1481	1832	9353	10662	1711	1966	14367	15408	2850	3644
25-29	12121	12594	1649	1853	10436	10125	1779	2199	12100	10778	2595	2850
30-34	10617	10371	1454	1732	10517	10827	1736	2271	8533	8204	2128	2429
35-39	9470	9713	1511	1760	11026	11833	1791	1987	7971	8363	2021	2495
40-44	8548	8887	1381	1433	9674	10103	1480	1759	8940	9418	1956	2421
45-49	7244	7613	1276	1402	8991	9531	1429	1701	9561	10524	1841	2002
50-54	6377	6727	1058	1063	7976	8557	1246	1361	8698	9423	1483	1760
55-59	5184	5587	744	676	6659	7582	1157	1233	7645	8737	1310	1568
60-64	4101	4519	534	468	5366	6435	850	916	6497	7782	1130	1279
65-69	3136	3597	529	580	4215	5419	746	800	4662	6597	946	1216
70-74	1997	2473	251	249	3051	4221	461	496	3466	5440	607	803
75-79#	1766	2552	210	226	1871	2707	282	316	2182	3866	393	517
80-84#	0	0	0	0	866	1474	109	131	1236	2459	200	307
85-UP	267	435	35	61	859	961	88	131	683	1545	186	249
TOTALS	117993	123658	17806	19321	144890	154456	27157	29765	150610	161911	38718	42237
GRAND TOTAL				278778				356268				393476

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	4973.0	4379.1	1.136		9471.0	9477.5	0.999		11600.0	11921.3	0.973	
CV-RENAL	2383.0	2245.0	1.061		4931.0	5018.4	0.983		5573.0	6633.1	0.840	
OBSERVED	2383.0	2245.0	1.061		4931.0	5018.4	0.983		5573.0	6633.1	0.840	
HEART	1651.0	1592.1	1.037		3410.0	3528.9	0.966		3787.0	4600.2	0.823	
OBSERVED	1651.0	1592.1	1.037		3410.0	3528.9	0.966		3787.0	4600.2	0.823	
NON CV-R	2590.0	2134.1	1.214		4540.0	4459.1	1.018		6027.0	5268.2	1.140	
OBSERVED	2590.0	2134.1	1.214		4540.0	4459.1	1.018		6027.0	5268.2	1.140	
CANCER	695.0	694.1	1.001		1376.0	1471.9	0.935		1968.0	1802.5	1.092	
OBSERVED	695.0	694.1	1.001		1376.0	1471.9	0.935		1968.0	1802.5	1.092	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

69-71

1971

1970

1969

1961

1959

1950

49-50

SUM

3090

1659

1151

1611

459

443

1376

9471

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960		
	WM	WF	NH	WM	WF	NH
IT-1	545	475	244	589	531	279
1-4	1932	1898	720	1929	1811	943
5-9	2016	1833	683	2258	2185	1082
10-14	1561	1534	587	2087	2053	779
15-19	1333	1553	519	1550	1660	565
20-24	2034	2230	714	1520	1610	464
25-29	2159	2149	839	1379	1493	452
30-34	1956	1971	692	1629	1613	600
35-39	1970	2128	709	1659	1714	611
40-44	1912	1848	700	1495	1655	524
45-49	1691	1596	608	1631	1751	515
50-54	1531	1357	520	1598	1590	492
55-59	1182	1045	384	1402	1432	474
60-64	1011	946	277	1149	1137	361
65-69	707	730	231	884	917	305
70-74	452	515	123	648	701	178
75-79#	379	517	84	368	451	92
80-84#	0	0	0	143	237	34
85-89P	49	95	9	76	156	28
TOTALS	24420	24420	8671	24029	24697	8778
GRAND TOTAL						96715

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE		1949-50	1959-61	1969-71
TOTAL	OBSERVED	1507.0	2250.0	2310.0
	EXPECTED*	1121.3	2014.8	2203.7
	OBS/EXP	1.344	1.117	1.048
CV-RENAL	OBSERVED	777.0	1227.0	1162.0
	EXPECTED*	594.1	1058.3	1258.2
	OBS/EXP	1.377	1.159	0.924
HEART	OBSERVED	590.0	752.0	886.0
	EXPECTED*	395.8	739.5	861.2
	OBS/EXP	1.491	1.017	1.025
NON CV-R	OBSERVED	730.0	1023.0	1148.0
	EXPECTED*	557.3	956.4	945.5
	OBS/EXP	1.310	1.070	1.214
CANCER	OBSERVED	100.0	100.0	100.0
	EXPECTED*	100.0	100.0	100.0
	OBS/EXP	1.000	1.000	1.000

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949	1950	49-50 SUR	1959	1960	1961	59-61 SUR	1969	1970	1971	69-71 SUR
TOTAL	752	755	1507	716	769	765	2250	791	777	742	2310
CV-RENAL	365	412	777	408	419	400	1227	413	385	373	1162
HEART	282	308	590	262	262	250	752	304	313	281	886
NON CV-R	387	343	730	308	350	365	1023	387	392	369	1148
CANCER	97	97	194	106	143	143	353	146	137	147	430

CITY CHARACTERISTICS

STATE	1950	RANK BY POPULATION	TEXAS
ALABAMA	175		175
ARIZONA	8218	MILE	8218
CALIFORNIA	2943	MILE	2943
CONNECTICUT	3112		3112
DELAWARE	8003		8003
FLORIDA	153		153
GEORGIA	54		54
IDaho	183	JAN MEAN TEMPERATURE	183
ILLINOIS	45	JULY MEAN TEMPERATURE	45
INDIANA	T	MEAN ANNUAL PRECIPITATION	T
KANSAS	GROUND	LAND RESOURCE REGION	GROUND
KENTUCKY	115	WATER SOURCE	115
Louisiana	0	TOTAL HARDNESS	0
MAINE	PM	NON-CARBONATE HARDNESS	PM
MARYLAND	NO ART	FLOUORINATION STATUS	NO ART

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE
LT 1	5140	5100	1512	1483	9032	8656	3508	3594	8561	8359	3709	3729
1-4	20965	20156	5409	5521	35751	34336	13393	13260	31258	29941	15092	14907
5-9	19834	19280	5131	5235	40340	39428	13596	13637	44570	42664	20751	20601
10-14	14547	14663	3668	4277	32661	31997	9622	9842	44928	43541	19449	19716
15-19	12975	13558	3639	4599	22036	24374	6705	7657	40138	41102	15303	16789
20-24	19501	12966	5462	6997	20216	25436	6966	8968	37762	45073	12526	16475
25-29	23607	24424	6049	7113	25556	27032	6995	9197	37601	36689	11536	13235
30-34	20800	21317	5351	6033	29248	29691	8195	9340	29141	28296	9778	11343
35-39	20186	20452	5447	6241	28780	28601	7681	8263	26991	27253	8989	10344
40-44	18123	17916	4474	4921	24130	24405	6245	6608	29597	29950	8692	9865
45-49	15748	15014	4221	4158	22095	22255	5519	5855	28801	29463	7660	8153
50-54	12697	11673	3266	2929	18730	18820	4662	4701	23238	24045	6103	6400
55-59	9577	9244	2166	1833	15285	15571	3920	3931	19807	20943	5177	5554
60-64	7172	7201	1467	1310	10843	11911	2651	2690	15311	17379	4257	4740
65-69	4920	5705	1207	1401	5915	5913	2046	2215	10420	13516	3310	3522
70-74	2350	3695	585	653	5126	4766	1230	1416	6636	10195	2018	2459
75-79	2467	3687	466	615	3005	4437	716	877	4036	6953	1141	1435
80-84	0	0	0	0	1344	2435	238	345	2024	3394	589	859
85-89	385	635	79	142	734	1465	209	349	1316	3027	507	800
TOTALS	231614	236689	60199	65461	352827	367720	104857	112815	442106	462783	156587	171326
GRAND TOTAL				596163				938219				1232802

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DISEASE RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	9891.0	28782.0	29577.4		9891.0	28782.0	29577.4		9891.0	28782.0	29577.4	
CV-RENAL	4393.0	9690.0	13332.0		4393.0	9690.0	13332.0		4393.0	9690.0	13332.0	
HEART	2946.0	6751.0	9454.0		2946.0	6751.0	9454.0		2946.0	6751.0	9454.0	
NON CV-R	5498.0	10202.0	15356.0		5498.0	10202.0	15356.0		5498.0	10202.0	15356.0	
CANCER	1412.0	3132.1	4421.7		1412.0	3132.1	4421.7		1412.0	3132.1	4421.7	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE	
STATE	TEXAS		
1950 RANK BY POPULATION	14		
1950 POP/SQ. MILE	3726		
1970 POP/SQ. MILE	2841		
1949 MED. FAM. INCOME	3389		
1969 MED. FAM. INCOME	5876		
URBAN CLASS	CENTRAL		
1950 URBAN AREA RANK	17		
JAN MEAN TEMPERATURE	53		
JULY MEAN TEMPERATURE	83		
MEAN ANN. PRECIPITATION	45		
LAND RESOURCE REGION	T		
WATER SOURCE	GROUND AND SURFACE		
TOTAL HARDNESS	73 PPM		
NON-CARBONATE HARDNESS	0 PPM		
FLUORIDATION STATUS	NO ARTIFICIAL, OPTIMUM NATURAL		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	759	809	1	1	974	978	9	13	822	839	6	4
1-4	3074	2919	4	4	3645	3548	21	17	3095	2956	22	21
5-9	3042	2912	1	3	3983	3954	6	14	4308	4255	34	40
10-14	2519	2562	3	3	3514	3446	7	7	4244	4230	36	31
15-19	2161	2466	1	3	2490	2672	13	8	3468	3560	30	13
20-24	1634	2435	6	8	1686	2225	13	21	3425	2174	100	29
25-29	1799	2199	9	5	1938	2317	13	13	1851	1842	19	25
30-34	1552	1826	4	5	1558	1948	5	6	1596	1860	25	26
35-39	1460	1634	5	5	1340	1554	4	2	1347	1870	11	7
40-44	1208	1505	4	6	1310	1602	4	2	1401	1744	3	7
45-49	1009	1165	1	2	1166	1458	1	1	1113	1415	2	8
50-54	799	979	8	5	1047	1256	1	0	1158	1394	5	4
55-59	635	747	0	4	785	969	3	2	1043	1373	3	2
60-64	517	692	2	0	703	825	4	1	911	1197	4	4
65-69	267	392	1	1	511	652	0	1	644	856	4	3
70-74	284	383	0	2	331	431	0	0	427	520	1	0
75-79*	0	0	0	0	113	183	1	0	221	384	1	1
80-84*	69	93	1	0	75	134	0	1	121	277	0	0
85-UP												
TOTALS	24294	27507	51	58	28481	31975	106	116	32542	35896	332	254
GRAND TOTAL				51510				60678				69024

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	973.0	1319.0	1505.0	653.9	1284.4	1691.3	1.488	1.027	0.690
CV-RENAL	275.0	503.0	650.0	320.6	648.0	930.0	0.858	0.776	0.699
HEART	182.0	348.0	432.0	230.0	465.2	656.4	0.791	0.748	0.658
NON CV-R	698.0	816.0	885.0	333.3	636.3	761.2	2.094	1.282	1.123
CANCER	99.0	186.0	257.0	101.8	200.4	259.4	0.973	0.938	0.991

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS		
	1949	1950	1959	1960	1961	1969	1970	1971
TOTAL	508	465	449	447	423	502	493	510
CV-RENAL	136	139	153	169	181	216	211	223
HEART	84	96	107	109	132	126	147	159
NON CV-R	372	326	296	278	242	286	282	287
CANCER	47	52	66	73	49	82	90	85

STATE		TEXAS	
1950 RANK BY POPULATION	221	1950 RANK BY POPULATION	3845
1950 POP/SQ. MILE	3367	1970 POP/SQ. MILE	3367
1949 MED. FAM. INCOME	1987	1949 MED. FAM. INCOME	1987
1969 MED. FAM. INCOME	4913	1969 MED. FAM. INCOME	4913
URBAN CLASS	INDEPENDENT	URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	57	1950 URBAN AREA RANK	57
JAW MEAN TEMPERATURE	87	JAW MEAN TEMPERATURE	87
MAIN FISH CATCH	19	MAIN FISH CATCH	19
LAND RESOURCE REGION	I	LAND RESOURCE REGION	I
WATER SOURCE	SURFACE	WATER SOURCE	SURFACE
TOTAL HARDNESS	328 PPM	TOTAL HARDNESS	328 PPM
NON-CARBONATE HARDNESS	216 PPM	NON-CARBONATE HARDNESS	216 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, OPTIMUM NATURAL	FLUORIDATION STATUS	NO ARTIFICIAL, OPTIMUM NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	851	776	82	98	1710	1701	188	202
1-4	3180	3147	316	350	6206	6126	720	810
5-9	2773	2737	285	349	6684	6470	743	753
10-14	2092	2067	230	272	5450	5118	493	582
15-19	2810	2912	262	266	5150	5474	358	403
20-24	4377	3506	308	351	6113	6017	337	381
25-29	3639	3392	316	336	4871	4400	355	337
30-34	2829	2576	260	256	4197	4067	343	422
35-39	2314	2330	260	256	3788	3847	320	344
40-44	2074	2229	237	215	3231	3630	320	344
45-49	1650	1827	182	144	2573	3087	290	293
50-54	1345	1462	183	143	2003	2652	182	101
55-59	1083	1067	133	122	1685	1571	91	82
60-64	803	867	43	34	1392	1258	91	56
65-69	590	681	43	27	1017	967	45	30
70-74	392	395	20	14	727	664	18	23
75-79	292	324	20	0	460	360	8	10
80-84	0	0	0	0	220	360	8	9
85-89	54	62	7	5	132	190	12	9
TOTALS	33212	32277	3103	3155	59005	59259	5046	5381
GRAND TOTAL				71747				128691

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	SUM		1959	1960	1961	SUM
TOTAL	389	463	852		762	785	798	2345
CV-RENAL	129	166	295		315	329	344	988
HEART	92	107	199		221	226	251	698
NON CV-R	260	297	557		447	456	454	1357
CANCER	35	58	93		112	101	100	313

CITY CHARACTERISTICS

STATE	TEXAS
1950 RANK BY POPULATION	163
1950 POP/SQ. MILE	4220
1970 POP/SQ. MILE	4220
1949 MED. FAM. INCOME	3328
1969 MED. FAM. INCOME	8474
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	38
JAN MEAN TEMPERATURE	79
JULY MEAN TEMPERATURE	79
MEAN ANNUAL PRECIPITATION	18
LAND RESOURCE REGION	H
WATER RESOURCES	GROUND
TOTAL HARDNESS	422 PPM
NON-CARBONATE HARDNESS	152 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, HIGH NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*
TOTAL	852.0	822.6	1.036		2345.0	2960.0
CV-RENAL	295.0	376.1	0.784		988.0	1358.0
HEART	199.0	271.8	0.732		698.0	918.0
NON CV-R	557.0	446.5	1.247		1357.0	1602.0
CANCER	93.0	127.5	0.729		313.0	459.8
					369.3	492.8
					0.847	0.931

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	453	462	195	211	530	487	312	328
5-9	1862	1412	706	724	1976	1877	1198	1278
10-14	1516	1526	518	505	2233	2218	1319	1354
15-19	1391	1353	464	513	2698	2025	1096	1137
20-24	1673	2055	566	737	1591	1745	642	716
25-29	1951	2055	635	750	1203	1422	465	678
30-34	1623	1785	585	668	1325	1369	600	795
35-39	1737	1900	568	685	1520	1534	771	871
40-44	1759	1744	493	478	1532	1716	738	812
45-49	1600	1548	435	444	1410	1620	640	643
50-54	1419	1251	354	281	1541	1617	531	562
55-59	1038	913	290	192	1537	1562	441	456
60-64	650	658	145	119	1380	1320	387	381
65-69	453	441	114	90	1099	1070	292	240
70-74	256	297	60	55	775	790	243	210
75-79#	196	266	43	39	404	547	118	110
80-84*	0	0	0	0	276	330	54	52
85-UP	28	50	7	13	142	173	26	23
TOTALS	21425	22154	6791	7160	22621	23524	9931	10600
GRAND TOTAL				57530				66676

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1969				1970				1971				69-71			
	1949	1950	49-50	SUM	1959	1960	1961	59-61	1969	1970	1971	SUM	1969	1970	1971	SUM	1969	1970	1971	SUM	69-71	SUM	69-71	SUM
TOTAL	418	421	839		484	572	533	1589	604	615	610	1829	604	615	610	1829	604	615	610	1829	604	615	610	1829
CV-RENAL	180	204	384		245	272	252	769	296	293	293	882	296	293	293	882	296	293	293	882	296	293	293	882
HEART	118	127	245		161	194	184	539	197	197	197	592	197	197	197	592	197	197	197	592	197	197	197	592
NON CV-R	238	217	455		239	300	281	820	308	322	317	947	308	322	317	947	308	322	317	947	308	322	317	947
CANCER	61	60	121		86	90	100	276	112	122	134	368	112	122	134	368	112	122	134	368	112	122	134	368

CITY CHARACTERISTICS

CODE

STATE	TEXAS
1950 RANK BY POPULATION	205
1950 POP./SQ. MILE	4716
1970 POP./SQ. MILE	1190
1949 MED. FAM. INCOME	3738
1969 MED. FAM. INCOME	7841
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	141
JAN MEAN TEMPERATURE	52
JULY MEAN TEMPERATURE	81
MEAN ANN. PRECIPITATION	55
LAND RESOURCE REGION	T
WATER SOURCE	SURFACE
TOTAL HARDNESS	45 PPM
NON-CARBONATE HARDNESS	0 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1953

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL
CV-RENAL	384.0	769.0	882.0		353.4	846.8	1083.8		353.4	846.8	1083.8	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
HEART	245.0	539.0	582.0		251.8	597.2	746.9		251.8	597.2	746.9	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
MON CV-R	455.0	820.0	947.0		414.3	862.5	878.9		414.3	862.5	878.9	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
CANCER	121.0	276.0	368.0		119.1	264.6	306.5		119.1	264.6	306.5	
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NE	WM	WF	NM	NE
LT 1	606	540	28	25	674	637	49	41
1-4	2368	2471	128	129	2997	2465	158	171
5-9	2271	2231	123	121	2945	2955	153	158
10-14	1759	1794	121	116	2683	2740	156	160
15-19	1690	1752	147	117	2225	2161	150	116
20-24	2457	2175	171	124	1901	1797	124	97
25-29	2283	2307	120	123	1713	1750	92	102
30-34	2030	1908	102	116	1618	1870	64	109
35-39	1801	1824	83	133	1728	1862	64	113
40-44	1634	1655	123	135	1598	1657	59	85
45-49	1452	1472	103	129	1492	1534	85	104
50-54	1462	1477	79	179	1492	1534	85	104
55-59	903	970	50	37	1194	1377	125	137
60-64	734	798	32	42	925	1136	70	171
65-69	656	636	38	42	814	957	39	60
70-74	392	429	24	23	646	784	21	38
75-79*	342	423	11	15	399	492	28	22
80-84*	0	0	0	0	196	300	8	6
85-UP	58	86	5	0	116	193	5	8
TOTALS	24529	24567	1490	1507	27269	28362	1523	1661
GRAND TOTAL			52093				58815	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*	OBSERVED	EXPECTED*
TOTAL	795.0	746.6	1509.0	1602.8	1947.0	2003.7
CV-RENAL	302.0	282.0	792.0	876.8	1056.0	1166.5
HEART	226.0	273.1	490.0	621.5	679.0	813.3
NON CV-R	493.0	365.6	727.0	725.0	891.0	839.2
CANCER	98.0	118.9	193.0	251.6	282.0	307.6

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	
	STATE	TEXAS
1950 RANK BY POPULATION	220	1809
1950 POP/SQ. MILE	1896	1896
1970 POP/SQ. MILE	1896	1896
1949 MED. FAM. INCOME	2855	2855
1969 MED. FAM. INCOME	7575	7575
URBAN CLASS	INDEPENDENT	INDEPENDENT
1950 URBAN AREA RANK	-	-
JAN MEAN TEMPERATURE	47	47
JULY MEAN TEMPERATURE	82	82
MEAN ANN. PRECIPITATION	19	19
LAND RESOURCE REGION	H	H
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	200 PPM	200 PPM
NON-CARBONATE HARDNESS	46 PPM	46 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				1970		1971		1972	
	1949	1950	1959	1960	1961	1969	1970	1971	1972	1973
TOTAL	374	421	475	534	500	618	663	666	666	666
CV-RENAL	132	170	242	270	270	346	355	355	355	355
HEART	102	124	142	161	187	213	236	230	230	230
NON CV-R	242	251	233	264	230	272	308	311	311	311
CANCER	43	55	56	72	65	94	88	100	100	100
TOTALS	24529	24567	27269	28362	1523	1661	15815	1671	1791	1791
GRAND TOTAL			52093			58815		63884		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	5273	5150	336	361	7700	7307	632	631
1-4	20102	19969	1271	1172	29617	28868	2342	2406
5-9	18809	18409	1162	1162	33542	32775	2541	2557
10-14	18212	14104	867	902	28312	28376	1984	1918
15-19	12479	14088	847	943	19420	21402	1273	1459
20-24	14195	17466	1033	1426	15864	18984	1127	1441
25-29	16473	18510	1392	1564	17015	18063	1310	1670
30-34	14153	11643	1205	1428	17385	19288	1290	1726
35-39	13017	14057	1238	1448	17852	20179	1417	1705
40-44	11770	12477	1111	1194	15189	15788	1307	1478
45-49	9966	11027	889	1065	13591	14838	1165	1364
50-54	8500	9444	830	846	12096	13160	1026	1189
55-59	7161	7858	666	590	10186	11601	791	965
60-64	5516	6386	472	469	7802	9519	673	799
65-69	4322	5482	354	483	6475	8204	606	633
70-74	2725	3579	182	205	4721	6250	380	506
75-79#	2517	3815	147	256	2893	4196	207	309
80-84#	0	0	0	0	1347	2374	81	138
85-UP	450	753	29	60	747	1461	49	126
TOTALS	181680	197217	13971	15574	261754	282743	20201	23020
GRAND TOTAL				408442				587718

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	5273	5150	336	361	7700	7307	632	631	6375	6106	603	552
1-4	20102	19969	1271	1172	29617	28868	2342	2406	23252	22511	2168	2154
5-9	18809	18409	1162	1162	33542	32775	2541	2557	33161	32196	3163	3193
10-14	18212	14104	867	902	28312	28376	1984	1918	33788	33037	3356	3329
15-19	12479	14088	847	943	19420	21402	1273	1459	29564	31173	2695	2916
20-24	14195	17466	1033	1426	15864	18984	1127	1441	22686	27475	1804	2381
25-29	16473	18510	1392	1564	17015	18063	1310	1670	18537	19931	1462	1829
30-34	14153	11643	1205	1428	17385	19288	1290	1726	14738	16356	1297	1652
35-39	13017	14057	1238	1448	17852	20179	1417	1705	14442	16231	1347	1837
40-44	11770	12477	1111	1194	15189	15788	1307	1478	15480	18255	1412	1956
45-49	9966	11027	889	1065	13591	14838	1165	1364	16435	19035	1489	1805
50-54	8500	9444	830	846	12096	13160	1026	1189	14121	15111	1306	1495
55-59	7161	7858	666	590	10186	11601	791	965	11973	13588	1100	1349
60-64	5516	6386	472	469	7802	9519	673	799	10139	12161	964	1209
65-69	4322	5482	354	483	6475	8204	606	633	7428	10263	701	999
70-74	2725	3579	182	205	4721	6250	380	506	5333	8088	549	775
75-79#	2517	3815	147	256	2893	4196	207	309	3595	5830	341	478
80-84#	0	0	0	0	1347	2374	81	138	2004	3651	174	276
85-UP	450	753	29	60	747	1461	49	126	1171	2503	111	241
TOTALS	181680	197217	13971	15574	261754	282743	20201	23020	284222	313501	26004	30426
GRAND TOTAL				408442				587718				654153

CITY CHARACTERISTICS

CODE

STATE	TEXAS
1950 RANK BY POPULATION	25
1950 POP./SQ. MILE	5877
1970 POP./SQ. MILE	3555
1949 MED. FAM. INCOME	2685
1969 MED. FAM. INCOME	7734
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	29
JAN MEAN TEMPERATURE	50
JULY MEAN TEMPERATURE	84
MEAN ANN. PRECIPITATION	27
LAND RESOURCE REGION	J
WATER SOURCE	GROUND
TOTAL HARDNESS	223 PPM
NON-CARBONATE HARDNESS	26 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	7642.0	13795.0	16003.0
EXPECTED*	6013.0	13785.4	17418.8
OBS/EXP	1.271	1.001	0.919
CV-Renal			
OBSERVED	2982.0	6359.0	7571.0
EXPECTED*	3048.3	7161.7	9653.6
OBS/EXP	0.978	0.888	0.784
Heart			
OBSERVED	2052.0	4250.0	5182.0
EXPECTED*	2165.6	5068.3	6750.4
OBS/EXP	0.948	0.839	0.768
NON CV-R			
OBSERVED	4660.0	7436.0	8432.0
EXPECTED*	2964.7	6623.7	7765.2
OBS/EXP	1.572	1.123	1.086
Cancer			
OBSERVED	973.0	2168.0	2741.0
EXPECTED*	935.1	2124.3	2670.4
OBS/EXP	1.041	1.021	1.026

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT 1	231	218	67	70
1-4	896	917	228	217
5-9	813	793	217	248
10-14	596	615	185	166
15-19	528	682	186	186
20-24	680	1016	168	241
25-29	971	1069	203	241
30-34	920	838	149	178
35-39	729	795	152	165
40-44	648	710	142	165
45-49	578	622	119	133
50-54	722	560	99	99
55-59	647	452	92	82
60-64	457	414	59	62
65-69	300	342	67	71
70-74	210	262	41	44
75-79	209	247	44	42
80-84	0	0	0	0
85-89	25	40	5	7
TOTALS	10160	10592	2238	2477
GRAND TOTAL				25867

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

	OBSERVED DEATHS BY CAUSE AND YEAR													
	1949		1950		49-50		1959		1960		1961		59-61	
		SUM		SUM		SUM		SUM		SUM		SUM		SUM
TOTAL	198	223	198	223	421	421	283	283	331	331	282	282	895	895
CEREBRAL	98	177	98	177	199	199	107	107	127	127	106	106	310	310
HEART	66	67	66	67	133	133	108	108	122	122	113	113	343	343
NON CV-R	100	112	100	112	212	212	116	116	158	158	112	112	381	381
CANCER	28	31	28	31	59	59	28	28	43	43	39	39	110	110

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

1960				1970			
WM	WF	MM	MF	WM	WF	MM	MF
250	271	91	84	253	197	44	62
632	1001	367	341	753	716	245	236
1139	1187	362	383	1254	1268	349	314
1095	1064	295	258	1207	1107	384	368
732	877	175	208	1139	1168	283	341
719	552	128	183	968	1083	163	218
702	672	168	201	852	856	141	166
732	854	178	223	656	654	114	156
813	969	180	200	697	711	146	154
826	805	140	175	812	835	168	185
777	758	130	169	893	938	156	168
702	730	130	151	889	801	135	164
668	611	113	119	772	794	135	143
554	568	87	77	650	736	113	157
504	504	76	101	614	642	85	124
594	544	76	101	472	588	66	54
394	423	59	66	441	403	51	71
218	297	35	44	327	308	26	34
118	178	21	21	155	155	26	34
60	94	13	10	104	198	26	29
1260C		2748	3014	13424	14033	2830	3144
3057			30419				334831

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

	OBSERVED DEATHS BY CAUSE AND YEAR					1971	1970	1969	59-61		69-71 SDM
	1960	1961	SDM	1961	1960						
1	331	282	896	361	345	384	361	345	384	1050	
2	101	107	387	201	198	201	197	198	201	442	
3	122	113	343	133	154	159	133	154	159	442	
4	101	107	387	201	198	201	197	198	201	442	
5	101	107	387	201	198	201	197	198	201	442	
6	101	107	387	201	198	201	197	198	201	442	
7	101	107	387	201	198	201	197	198	201	442	
8	101	107	387	201	198	201	197	198	201	442	
9	101	107	387	201	198	201	197	198	201	442	
10	101	107	387	201	198	201	197	198	201	442	
11	101	107	387	201	198	201	197	198	201	442	
12	101	107	387	201	198	201	197	198	201	442	
13	101	107	387	201	198	201	197	198	201	442	
14	101	107	387	201	198	201	197	198	201	442	
15	101	107	387	201	198	201	197	198	201	442	
16	101	107	387	201	198	201	197	198	201	442	
17	101	107	387	201	198	201	197	198	201	442	
18	101	107	387	201	198	201	197	198	201	442	
19	101	107	387	201	198	201	197	198	201	442	
20	101	107	387	201	198	201	197	198	201	442	
21	101	107	387	201	198	201	197	198	201	442	
22	101	107	387	201	198	201	197	198	201	442	
23	101	107	387	201	198	201	197	198	201	442	
24	101	107	387	201	198	201	197	198	201	442	
25	101	107	387	201	198	201	197	198	201	442	
26	101	107	387	201	198	201	197	198	201	442	
27	101	107	387	201	198	201	197	198	201	442	
28	101	107	387	201	198	201	197	198	201	442	
29	101	107	387	201	198	201	197	198	201	442	
30	101	107	387	201	198	201	197	198	201	442	
31	101	107	387	201	198	201	197	198	201	442	
32	101	107	387	201	198	201	197	198	201	442	
33	101	107	387	201	198	201	197	198	201	442	
34	101	107	387	201	198	201	197	198	201	442	
35	101	107	387	201	198	201	197	198	201	442	
36	101	107	387	201	198	201	197	198	201	442	
37	101	107	387	201	198	201	197	198	201	442	
38	101	107	387	201	198	201	197	198	201	442	
39	101	107	387	201	198	201	197	198	201	442	
40	101	107	387	201	198	201	197	198	201	442	
41	101	107	387	201	198	201	197	198	201	442	
42	101	107	387	201	198	201	197	198	201	442	
43	101	107	387	201	198	201	197	198	201	442	
44	101	107	387	201	198	201	197	198	201	442	
45	101	107	387	201	198	201	197	198	201	442	
46	101	107	387	201	198	201	197	198	201	442	
47	101	107	387	201	198	201	197	198	201	442	
48	101	107	387	201	198	201	197	198	201	442	
49	101	107	387	201	198	201	197	198	201	442	
50	101	107	387	201	198	201	197	198	201	442	
51	101	107	387	201	198	201	197	198	201	442	
52	101	107	387	201	198	201	197	198	201	442	
53	101	107	387	201	198	201	197	198	201	442	
54	101	107	387	201	198	201	197	198	201	442	
55	101	107	387	201	198	201	197	198	201	442	
56	101	107	387	201	198	201	197	198	201	442	
57	101	107	387	201	198	201	197	198	201	442	
58	101	107	387	201	198	201	197	198	201	442	
59	101	107	387	201	198	201	197	198	201	442	
60	101	107	387	201	198	201	197	198	201	442	
61	101	107	387	201	198	201	197	198	201	442	
62	101	107	387	201	198	201	197	198	201	442	
63	101	107	387	201	198	201	197	198	201	442	
64	101	107	387	201	198	201	197	198	201	442	
65	101	107	387	201	198	201	197	198	201	442	
66	101	107	387	201	198	201	197	198	201	442	
67	101	107	387	201	198	201	197	198	201	442	
68	101	107	387	201	198	201	197	198	201	442	
69	101	107	387	201	198	201	197	198	201	442	
70	101	107	387	201	198	201	197	198	201	442	
71	101	107	387	201	198	201	197	198	201	442	
72	101	107	387	201	198	201	197	198	201	442	
73	101	107	387	201	198	201	197	198	201	442	
74	101	107	387	201	198	201	197	198	201	442	
75	101	107	387	201	198	201	197	198	201	442	
76	101	107	387	201	198	201	197	198	201	442	
77	101	107	387	201	198	201	197	198	201	442	
78	101	107	387	201	198	201	197	198	201	442	
79	101	107	387	201	198	201	197	198	201	442	
80	101	107	387	201	198	201	197	198	201	442	
81	101	107	387	201	198	201	197	198	201	442	
82	101	107	387	201	198	201	197	198	201	442	
83	101	107	387	201	198	201	197	198	201	442	
84	101	107	387	201	198	201	197	198	201	442	
85	101	107	387	201	198	201	197	198	201	442	
86	101	107	387	201	198	201	197	198	201	442	
87	101	107	387	201	198	201	197	198	201	442	
88	101	107	387	201	198	201	197	198	201	442	
89	101	107	387	201	198	201	197	198	201	442	
90	101	107	387	201	198	201	197	198	201	442	
91	101	107	387	201	198	201	197	198	201	442	
92	101	107	387	201	198	201	197	198	201	442	
93	101	107	387	201	198	201	197	198	201	442	
94	101	107	387	201	198	201	197	198	201	442	
95	101	107	387	201	198	201	197	198	201	442	
96	101	107	387	201	198	201	197	198	201	442	
97	101	107	387	201	198	201	197	198	201	442	
98	101	107	387	201	198	201	197	198	201	442	
99	101	107	387	201	198	201	197	198	201	442	
100	101	107	387	201	198	201	197	198	201	442	

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	421.6	896.0	1096.0
EXPECTED*	455.6	1005.3	1290.5
OBS/EXP	0.924	0.891	0.845
CV-C-PENAL			
OBSERVED	209.0	510.0	616.0
EXPECTED*	238.7	558.7	763.6
OBS/EXP	0.876	0.913	0.799
HEART			
OBSERVED	133.0	343.0	442.0
EXPECTED*	166.8	392.2	527.0
OBS/EXP	0.788	0.875	0.839
NON CV-R			
OBSERVED	212.0	386.0	486.0
EXPECTED*	216.9	446.6	527.0
OBS/EXP	0.977	0.864	0.911
CANCER			
OBSERVED	59.0	110.0	180.0
EXPECTED*	70.8	154.8	192.8
OBS/EXP	0.833	0.710	0.934

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE
STATE		TEXAS
1950 RANK BY POPULATION	470	
1950 POP./SQ. MILE	3691	
1970 POP./SQ. MILE	1479	
1949 MED. FAM. INCOME	2817	
1969 MED. FAM. INCOME	7809	
URBAN CLASS		INDEPENDENT
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	47	
JULY MEAN TEMPERATURE	84	
MEAN ANN. PRECIPITATION	34	
LAND RESOURCE REGION	J	
WATER SOURCE		GROUND AND SURFACE
TOTAL HARDNESS		51 PPM
NON-CARBONATE HARDNESS		14 PPM
FLUORIDATION STATUS		FLUORIDATED IN 1951

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	352	291	118	122	437	370	173	157	362	370	162	164
1-4	1289	1240	409	430	1688	1618	644	629	1345	1340	539	530
5-9	1191	1108	351	412	2094	2028	707	631	1927	1978	691	688
10-14	911	845	316	350	1859	1847	503	489	2105	2039	693	675
15-19	893	1051	395	641	1365	1513	431	479	2267	2264	666	702
20-24	969	1296	503	698	977	1205	439	542	1471	1675	493	630
25-29	1291	1382	423	499	1168	1380	372	420	1405	1539	325	382
30-34	1237	1303	382	425	1442	1536	340	410	1210	1288	298	316
35-39	1192	1319	370	439	1544	1615	300	376	1297	1362	288	356
40-44	1107	1142	362	367	1332	1391	262	287	1305	1510	305	363
45-49	940	959	273	317	1253	1392	273	371	1403	1551	242	304
50-54	718	768	214	244	1087	1130	274	320	1245	1319	251	268
55-59	573	636	123	134	886	1047	247	259	1079	1396	253	306
60-64	459	531	117	136	673	793	167	185	978	1173	205	278
65-69	357	417	117	144	584	684	113	193	777	1078	197	229
70-74	226	264	49	73	334	320	182	72	488	813	134	168
75-79*	265	300	50	58	334	320	182	72	488	813	134	168
80-84*	20	0	0	0	110	192	21	42	100	392	57	74
85-89*	25	36	15	11	51	105	17	25	105	252	50	49
TOTALS	13924	14930	4593	5521	19035	20746	5448	6001	21286	23956	5934	6594
GRAND TOTAL				3968				51230				57770

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE* AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	583.0	1266.0	0.461	583.0	1266.0	0.461	583.0	1266.0	0.461
CV-RENAL	295.0	664.0	0.444	295.0	664.0	0.444	295.0	664.0	0.444
HEART	288.0	604.0	0.477	288.0	604.0	0.477	288.0	604.0	0.477
NON CV-R	303.9	637.2	0.477	303.9	637.2	0.477	303.9	637.2	0.477
CANCER	67.0	210.0	0.319	67.0	210.0	0.319	67.0	210.0	0.319

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR						CITY CHARACTERISTICS					
	1949	1950	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	TEXAS
TOTAL	294	289	434	427	407	1268	511	559	575	1645	1950 RANK BY POPULATION	304
CV-RENAL	146	149	231	235	198	664	282	284	291	857	1950 POP/SQ. MILE	3093
HEART	93	108	169	168	155	492	210	210	211	631	1970 POP/SQ. MILE	2501
NON CV-R	148	140	203	192	209	604	229	275	284	788	1949 MED. FAM. INCOME	3032
CANCER	37	30	71	68	77	216	87	99	105	291	1969 MED. FAM. INCOME	8869
											URBAN CLASS	INDEPENDENT
											1950 URBAN AREA RANK	-
											JAN MEAN TEMPERATURE	45
											JULY MEAN TEMPERATURE	83
											MEAN ANN. PRECIPITATION	41
											LAND RESOURCE REGION	P
											WATER SOURCE	GROUND AND SURFACE
											TOTAL HARDNESS	71 PPM
											NON-CARBONATE HARDNESS	18 PPM
											FLUORIDATION STATUS	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NH	NP	WM	WF	NH	NP	WM	WF	NH	NP
LT 1	757	726	196	179	869	797	247	238	545	483	198	201
5-4	2683	2443	678	644	3130	3122	978	978	1841	2009	760	745
5-9	2602	2641	601	637	3762	3629	1153	1120	2906	2760	1035	1067
10-14	2019	2604	543	536	3463	3336	931	871	3239	3076	1163	1125
15-19	2416	3151	504	688	2867	3264	637	711	3740	4072	1023	1158
20-24	3700	3662	514	728	3055	3168	432	576	3957	3973	658	814
25-29	3634	3226	642	670	2480	2379	509	643	2142	2110	446	561
30-34	2854	2536	545	532	2578	2599	483	606	1670	1677	414	561
35-39	2525	2430	501	577	2505	2720	533	562	1706	1813	432	519
40-44	2191	2372	437	493	2568	2407	446	527	2152	2246	464	594
45-49	1963	2194	374	454	2392	2466	457	507	2487	2409	464	539
50-54	1970	1831	351	362	2048	2252	420	475	2249	2229	441	483
55-59	1770	1602	364	306	1776	2166	346	415	2056	2302	395	463
60-64	1310	1400	245	232	1529	1751	285	337	1745	2171	364	417
65-69	878	1142	214	288	1394	1621	297	341	1394	2108	274	383
70-74	654	824	122	148	1038	1308	218	273	1094	1519	225	285
75-79*	658	792	105	137	589	937	148	159	786	1258	150	203
80-84*	0	0	0	0	339	510	44	65	428	777	65	136
85-UP	91	143	29	38	179	321	44	77	230	564	74	110
TOTALS	34875	35219	6963	7649	38961	40753	8613	9481	36367	39556	9007	10386
GRAND TOTAL				84706				97808				95326

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1437.0	2899.0	0.982		1462.7	3031.9	0.956		1437.0	2899.0	0.956	
CV-RENAL	671.0	1572.0	0.876		765.9	1677.2	0.937		671.0	1572.0	0.937	
HEART	452.0	1019.0	0.840		537.9	1165.7	0.874		452.0	1019.0	0.874	
NON CV-R	766.0	1327.0	0.999		696.8	1354.6	1.092		766.0	1327.0	1.092	
CANCER	195.0	458.0	0.862		226.1	460.6	0.996		195.0	458.0	0.996	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE			
	STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE
TEXAS	131	3258	1624	1624
1950 RANK BY POPULATION	131	3258	1624	1624
1950 POP/SQ. MILE	1624	1624	1624	1624
1970 POP/SQ. MILE	1624	1624	1624	1624
1949 MED. FAM. INCOME	2822	2822	2822	2822
1969 MED. FAM. INCOME	7857	7857	7857	7857
URBAN CLASS	CENTRAL	CENTRAL	CENTRAL	CENTRAL
1950 URBAN AREA RANK	126	126	126	126
JAN MEAN TEMPERATURE	47	47	47	47
JULY MEAN TEMPERATURE	85	85	85	85
MEAN ANN. PRECIPITATION	32	32	32	32
LAND RESOURCE REGION	J	J	J	J
WATER SOURCE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE	GROUND AND SURFACE
TOTAL HARDNESS	156 PPM	156 PPM	156 PPM	156 PPM
NON-CARBONATE HARDNESS	31 PPM	31 PPM	31 PPM	31 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					1960					1970				
	WM	WF	NM	NF	6+	WM	WF	NM	NF	116	WM	WF	NM	NF	93
LT 1	635	650	80	20	64	1163	1167	106	116		734	733	96	34	
1-4	2324	2322	220	280	247	4529	4459	472	441		2463	2442	392	354	
5-9	2122	2127	181	215	168	4741	4750	490	501		3920	3754	584	568	
10-14	1559	1528	171	168	168	3830	3680	381	388		4157	4112	534	582	
15-19	7143	1951	538	167	168	5833	3113	445	305		6129	4074	804	527	
20-24	6061	2734	551	269	269	4204	3432	395	283		5584	4067	581	376	
25-29	3306	2614	282	226	226	3851	3495	330	363		2804	2736	260	331	
30-34	2522	2127	184	234	234	3563	3322	302	341		2324	2612	244	312	
35-39	1979	1979	203	236	236	3347	3221	273	253		2710	2550	249	342	
40-44	1613	1719	197	214	214	2793	2520	205	235		2323	2541	241	331	
45-49	1474	1640	175	217	217	2345	2471	212	247		2352	2531	215	235	
50-54	1276	1420	166	150	150	1946	2128	164	195		2021	2168	170	200	
55-59	1121	1206	112	91	91	1726	2021	156	198		1735	2021	155	208	
60-64	933	860	77	83	83	1405	1698	125	131		1509	1734	116	179	
65-69	598	695	51	67	67	1094	1417	112	100		1235	1423	103	132	
70-74	398	474	38	28	28	494	746	34	45		622	984	55	59	
75-79	344	451	37	16	16	498	742	34	45		324	604	33	43	
80-84*	0	0	0	0	0	285	362	15	12		201	441	32	33	
85-UP	57	82	8	5	5	147	203	12	8						
TOTALS	35505	26569	3271	2697	2697	48046	45127	4303	4248		44062	43412	5021	5069	
GRAND TOTAL				68042	68042				101724					97564	

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	899.0	1963.0	2458.0	899.0	1963.0	2458.0	899.0	1963.0	2458.0
CV-RENAL	409.0	1007.0	1287.0	409.0	1007.0	1287.0	409.0	1007.0	1287.0
HEART	310.0	740.0	865.0	310.0	740.0	865.0	310.0	740.0	865.0
MON CV-R	450.0	956.0	1171.0	450.0	956.0	1171.0	450.0	956.0	1171.0
CANCER	124.0	296.0	417.0	124.0	296.0	417.0	124.0	296.0	417.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS					CODE				
	1949	1950	1959	1960	1961	1969	1970	1971	SUM	69-71	STATE	TEXAS	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE
TOTAL	444	455	586	653	724	814	804	840	2458	2458	172	4826	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE
CV-RENAL	204	205	281	324	402	431	416	440	1287	1287	3212	3269	1949 MED. FAM. INCOME	1949 MED. FAM. INCOME	1970 MED. FAM. INCOME
HEART	153	157	205	238	297	295	297	297	865	865	7972	INDEPENDENT	1949 MED. FAM. INCOME	1949 MED. FAM. INCOME	1970 MED. FAM. INCOME
MON CV-R	240	250	305	329	322	383	388	400	1171	1171	INDEPENDENT	INDEPENDENT	1949 MED. FAM. INCOME	1949 MED. FAM. INCOME	1970 MED. FAM. INCOME
CANCER	58	66	102	104	90	127	153	137	417	417	JAN MEAN TEMPERATURE	40	1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK
											JULY MEAN TEMPERATURE	83	1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK
											MEAN ANNUAL PRECIPITATION	26	1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK
											WATER RESOURCES REGION	H	1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK
											WATER RESOURCES	67	1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK
											NON-CARBONATE HARDNESS	0 PPM	1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK
											FLUORIDATION STATUS	UNCERTAIN	1950 URBAN AREA RANK	1950 URBAN AREA RANK	1950 URBAN AREA RANK

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	757	715	16	16	887	887	37	30	789	683	39	35
1-4	2844	2682	46	67	3448	3355	154	120	2455	2291	109	97
5-9	2739	2580	46	59	3938	3836	149	138	2998	2940	160	165
10-14	2218	2244	53	36	3355	3420	147	130	3350	3206	183	172
15-19	2012	2333	26	55	2762	2953	107	81	3561	3781	197	162
20-24	1933	2239	70	57	1969	2240	74	63	3384	3830	180	135
25-29	2213	2273	86	95	1957	1871	60	70	2143	1979	87	76
30-34	1917	2063	111	78	1886	1940	87	90	1404	1420	73	72
35-39	1879	1867	75	63	2011	2133	122	96	1316	1385	57	63
40-44	1693	1716	65	36	2004	1990	120	100	1585	1667	76	97
45-49	1523	1582	60	32	1921	1910	80	73	1678	1707	93	94
50-54	1200	1302	37	30	1639	1566	30	23	1684	1706	155	98
55-59	1068	1089	50	20	1531	1504	38	23	1531	1508	58	58
60-64	832	820	37	16	1351	1344	25	26	1344	1320	52	48
65-69	534	568	23	16	1045	1189	25	26	1062	1220	52	43
70-74	462	526	14	2	788	919	29	19	797	1104	19	16
75-79#	0	0	0	0	486	593	15	9	534	838	10	29
80-84#	0	0	0	0	226	327	12	3	368	491	18	15
85-UP	74	104	2	0	132	174	4	0	229	323	10	7
TOTALS	27398	28111	892	711	33419	34307	1336	1135	32208	34198	1577	1495
GRAND TOTAL				57112				70197				69478

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	926.0	907.2	1.021	1824.0	1837.3	0.993	2060.0	2211.1	0.932
CV-RENAL	472.0	473.3	0.997	922.0	992.3	0.929	994.0	1273.5	0.781
HEART	328.0	341.5	0.960	682.0	709.2	0.962	715.0	894.1	0.801
NON CV-R	454.0	433.9	1.046	902.0	845.1	1.067	1065.0	937.6	1.137
CANCER	105.0	145.9	0.720	207.0	290.2	0.713	284.0	335.0	0.848

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	UTAH
1950 RANK BY POPULATION	206
1950 POP/SQ. MILE	3440
1970 POP/SQ. MILE	3293
1949 MED. FAM. INCOME	3489
1969 MED. FAM. INCOME	9193
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	26
JULY MEAN TEMPERATURE	75
MEAN ANN. PRECIPITATION	17
LAND RESOURCE REGION	D
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	158 PPM
NON-CARBONATE HARDNESS	8 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
1-4	390	394	2	1	513	509	1	0	792	700	12	12
5-9	1407	1292	0	5	1647	1540	7	11	1765	1628	25	34
10-14	1323	1318	0	1	1549	1479	7	8	1690	1595	22	13
15-19	1101	1078	3	0	1327	1328	5	6	1690	1613	15	19
20-24	1393	1711	4	8	2289	2971	15	15	3615	5156	62	96
25-29	1844	1883	19	14	2630	3136	55	46	6817	7798	171	172
30-34	1317	1136	12	4	1725	1049	34	11	2570	1800	105	66
35-39	998	984	2	0	821	723	15	9	927	831	40	20
40-44	856	861	1	1	678	763	12	3	708	664	16	13
45-49	783	763	2	0	744	865	3	3	645	713	9	6
50-54	697	662	4	0	714	807	3	2	694	829	7	5
55-59	585	596	1	1	713	687	3	2	725	824	5	1
60-64	469	522	2	1	599	622	2	0	641	747	4	4
65-69	409	413	2	1	473	533	0	2	558	668	0	3
70-74	333	356	3	0	379	459	3	0	461	558	1	2
75-79*	186	252	0	0	276	392	0	1	339	425	1	1
80-84*	0	0	0	0	197	245	2	0	183	361	0	0
85-UP	26	55	1	0	109	166	2	0	108	212	1	1
TOTALS	14303	14538	58	38	17440	18319	169	119	24955	27212	496	468
GRAND TOTAL			28937				36047				53131	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL												
		146.0	319.0			146.0	319.0			146.0	319.0	
		193.6	411.1			193.6	411.1			193.6	411.1	
		0.754	0.776			0.754	0.776			0.754	0.776	
HEART												
		107.0	236.0			107.0	236.0			107.0	236.0	
		139.1	291.6			139.1	291.6			139.1	291.6	
		0.769	0.809			0.769	0.809			0.769	0.809	
NON CV-R												
		147.0	307.0			147.0	307.0			147.0	307.0	
		190.9	376.7			190.9	376.7			190.9	376.7	
		0.770	0.815			0.770	0.815			0.770	0.815	
CANCER												
		39.0	72.0			39.0	72.0			39.0	72.0	
		58.5	117.5			58.5	117.5			58.5	117.5	
		0.656	0.613			0.656	0.613			0.656	0.613	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	UTAH
1950 RANK BY POPULATION	423
1950 POP/SQ. MILE	1654
1970 POP/SQ. MILE	2592
1949 MED. FAM. INCOME	3265
1969 MED. FAM. INCOME	7167
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	26
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	14
LAND RESOURCE REGION	D
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	152 PPM
NON-CARBONATE HARDNESS	16 PPM
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	1971
TOTAL	153	140	293	200	210	216	626	247	253	244	744	744
CV-RENAL	76	70	146	112	105	102	319	127	120	135	382	382
HEART	55	52	107	80	84	72	236	93	73	95	261	261
NON CV-R	77	70	147	88	105	114	307	120	133	109	362	362
CANCER	19	20	39	24	20	28	72	33	40	33	106	106

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950					1960					1970				
	WM	WF	NM	NF		WM	WF	NM	NF		WM	WF	NM	NF	
LT 1	2367	2336	39	30		2247	2242	52	49		1836	1803	75	74	
1-4	8794	8282	122	134		8303	8023	177	195		5684	5521	221	259	
5-9	8215	7993	87	96		9092	8772	211	230		6515	6418	263	256	
10-14	6311	6359	80	75		9454	8192	172	196		8667	8284	270	252	
15-19	5961	6715	105	104		7269	8368	124	119		7501	8285	291	257	
20-24	7820	8335	162	134		8776	9712	153	142		9701	10206	240	203	
25-29	7826	7789	226	182		8954	8505	145	108		9684	9206	240	203	
30-34	6638	6762	170	177		4602	5325	188	184		3684	3607	193	105	
35-39	5095	5629	128	75		5009	5372	188	184		3057	3363	101	126	
40-44	4773	5065	103	67		5007	5595	129	107		3559	3763	130	168	
45-49	4447	4862	88	55		4916	5501	89	76		3912	4557	189	158	
50-54	3407	3953	64	50		4338	4925	101	62		4216	4910	118	120	
55-59	3193	3581	88	42		4070	4863	92	83		3873	4831	85	76	
60-64	2668	3092	93	24		3876	4355	57	64		3070	3831	78	56	
65-69	1775	2185	66	15		3175	3741	56	53		3154	4300	78	55	
70-74	1528	2125	42	6		2448	3104	77	31		2603	3714	53	75	
75-79	0	0	0	0		1640	2216	57	15		1734	2692	35	54	
80-84	0	0	0	0		756	1243	19	9		1000	1795	35	20	
85-UP	269	411	5	1		403	723	9	2		693	1241	29	17	
TOTALS	87453	91566	1744	1358		89479	96000	2070	1905		80275	89966	2862	2782	
GRAND TOTAL			182121						189454					175885	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*	TOTAL	OBSERVED	EXPECTED*
		3211.0	5420.0		5420.0	5950.0		5950.0	6656.2
		3629.5	5789.3		5789.3	6656.2		6656.2	0.894
		1.060	0.938		0.938	0.894		0.894	
CV-RENAL									
		1619.0	2645.0		2645.0	2805.0		2805.0	3973.8
		1613.5	3262.5		3262.5	3973.8		3973.8	0.706
		1.003	0.811		0.811	0.706		0.706	
HEART									
		1194.0	1877.0		1877.0	1963.0		1963.0	2766.6
		1156.0	2316.4		2316.4	2766.6		2766.6	0.710
		1.033	0.810		0.810	0.710		0.710	
NON CV-R									
		1592.0	2775.0		2775.0	3145.0		3145.0	2682.4
		1415.9	2518.8		2518.8	2682.4		2682.4	1.172
		1.124	1.102		1.102	1.172		1.172	
CANCER									
		466.0	776.0		776.0	850.0		850.0	0.853
		482.2	913.1		913.1	996.0		996.0	
		0.966	0.850		0.850	0.853		0.853	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS				
	1949	1950	1959	1960	1961	1969	1970	1971	69-71 SUM	UTAH SUM
TOTAL	1542	1669	1856	1774	1790	1905	1978	2067	5950	52
CV-RENAL	790	829	885	877	883	871	922	1012	2805	3379
HEART	581	613	644	609	624	603	648	712	1963	2966
NON CV-R	752	840	971	897	907	1034	1056	1055	3145	3671
CANCER	205	261	272	249	255	282	274	294	851	8817
										54
										26
										76
										14
										186 FPM
										38 FPM
										NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF
LT 1	357	391	0	0	487	457	3	3	329	315	5	7	329	315	5	7	329	315
1-4	1414	1323	2	3	1691	1500	9	9	1106	1089	15	6	1106	1089	15	6	1106	1089
5-9	1320	1201	1	2	1701	1708	9	9	1663	1567	9	11	1663	1567	9	11	1663	1567
10-14	1108	1103	3	3	1557	1449	5	6	1766	1638	20	14	1766	1638	20	14	1766	1638
15-19	1404	1718	3	4	1652	1950	6	11	2539	2033	20	22	2539	2033	20	22	2539	2033
20-24	1733	1948	5	1	1585	1776	6	19	2632	2033	20	22	2632	2033	20	22	2632	2033
25-29	1395	1389	3	2	1115	1052	8	16	1198	1120	30	21	1198	1120	30	21	1198	1120
30-34	1067	1117	0	2	837	877	6	6	837	877	14	6	837	877	14	6	837	877
35-39	952	1085	3	2	928	1082	4	3	763	864	9	5	763	864	9	5	763	864
40-44	938	1078	5	2	869	1028	3	0	846	982	6	7	846	982	6	7	846	982
45-49	959	964	4	1	869	970	4	2	816	982	6	5	816	982	6	5	816	982
50-54	936	936	4	2	793	1005	3	2	752	914	5	3	752	914	5	3	752	914
55-59	676	738	5	2	683	867	3	2	688	836	5	3	688	836	5	3	688	836
60-64	567	659	1	0	594	765	3	0	606	842	2	1	606	842	2	1	606	842
65-69	428	589	3	0	458	687	1	2	470	735	2	1	470	735	2	1	470	735
70-74	300	488	2	2	318	607	2	0	382	602	2	1	382	602	2	1	382	602
75-79*	296	539	3	0	218	395	0	0	211	479	2	1	211	479	2	1	211	479
80-84*	0	0	0	0	130	257	0	1	125	310	0	0	125	310	0	0	125	310
85-90	61	110	0	1	75	164	0	0	84	236	0	0	84	236	0	0	84	236
TOTALS	15759	17322	44	30	16657	18732	77	65	17791	20562	158	122	17791	20562	158	122	17791	20562
GRAND TOTAL				33155				35531				38633				38633		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1950				49-50 SOM				1959				1960				1961				59-61 SOM				1969				1970				1971				69-71 SOM			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF								
TOTAL	328	284	612	612	386	326	330	1042	337	350	308	995	337	350	308	995	337	350	308	995	337	350	308	995	337	350	308	995	337	350	308	995	337	350	308	995								
CV-RENAL	185	159	344	344	213	181	173	567	180	165	180	530	180	165	180	530	180	165	180	530	180	165	180	530	180	165	180	530	180	165	180	530	180	165	180	530								
HEART	140	119	259	259	149	131	124	404	136	142	136	405	136	142	136	405	136	142	136	405	136	142	136	405	136	142	136	405	136	142	136	405	136	142	136	405								
NON CV-R	143	125	268	268	143	125	173	475	152	170	152	465	152	170	152	465	152	170	152	465	152	170	152	465	152	170	152	465	152	170	152	465	152	170	152	465								
CANCER	46	35	81	81	55	50	51	156	67	67	57	185	67	67	57	185	67	67	57	185	67	67	57	185	67	67	57	185	67	67	57	185	67	67	57	185								

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE RANK BY POPULATION 3070

1950 POP/SQ. MILE 3070

1970 POP/SQ. MILE 3070

1949 MED. FAM. INCOME 3059

1969 MED. FAM. INCOME 9908

URBAN CLASS INDEPENDENT

1950 URBAN AREA RANK 17

JAN MEAN TEMPERATURE 70

JULY MEAN TEMPERATURE 70

MEAN ANN. PRECIPITATION 32

LAND RESOURCE REGION R

WATER SOURCE SURFACE

TOTAL HARDNESS 56 PPM

NON-CARBONATE HARDNESS 21 PPM

FLUORIDATION STATUS FLUORIDATED IN 1952

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT-1	660	602	92	91	1138	1102	143	150	1003	956	163	194
1-4	2524	2546	299	300	3842	3705	625	620	3067	2884	794	782
5-9	2216	2121	299	309	3550	3564	633	692	3243	3069	981	981
10-14	1448	1485	246	268	3246	3334	493	451	2943	3029	947	997
15-19	1315	1445	217	275	2286	2897	336	351	2806	3677	727	924
20-24	1669	2227	328	384	3168	4070	306	384	5744	8058	641	897
25-29	2521	3169	409	459	3578	3104	393	409	6265	5436	657	696
30-34	2818	3035	351	407	2788	2884	361	433	3359	2715	479	559
35-39	2580	2750	302	342	2974	3411	396	421	2553	2075	472	521
40-44	2288	2345	302	282	2895	3043	343	354	2471	2628	437	498
45-49	1669	1720	223	252	2473	2722	331	337	2626	3177	412	467
50-54	1330	1416	200	186	2145	2374	262	246	2622	2951	347	341
55-59	1031	1064	109	103	1516	1754	210	233	2132	2506	291	323
60-64	726	797	100	95	1067	1374	133	123	1591	2053	203	217
65-69	463	639	85	94	761	1031	88	101	977	1418	146	181
70-74	271	448	56	54	479	742	62	66	581	1086	82	113
75-79*	222	449	31	49	260	506	36	45	363	829	39	70
80-84*	0	0	0	0	124	264	21	21	197	601	26	53
85-UP	40	72	9	9	60	157	6	20	148	394	17	30
TOTALS	25791	26330	3707	3959	38350	42038	5178	5457	44691	49542	7861	8844
GRAND TOTAL				61767				91023				110938

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	934.0	1882.0	2432.0
EXPECTED*	810.2	1884.1	2699.1
OBS/EXP	1.153	0.999	0.901
CV-RENAL			
OBSERVED			
EXPECTED*	389.1	910.0	1429.3
OBS/EXP			
HEART			
OBSERVED			
EXPECTED*	277.0	648.5	998.7
OBS/EXP			
NON CV-R			
OBSERVED			
EXPECTED*	421.1	974.1	1269.8
OBS/EXP			
CANCER			
OBSERVED			
EXPECTED*	128.3	296.1	412.5
OBS/EXP			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	1959	1961	1969	1970	1971	STATE
TOTAL	452	482	662	609	807	841	784	1950 BANK BY POPULATION
CV-RENAL								1950 POP/50. MILE
HEART								1970 POP/50. MILE
NON CV-R								1949 MED. FAM. INCOME
CANCER								1969 MED. FAM. INCOME
								URBAN CLASS
								1950 URBAN AREA
								JAN MEAN TEMPERATURE
								JULY MEAN TEMPERATURE
								MEAN ANN. PRECIPITATION
								LAND RESOURCE REGION
								WATER SOURCE
								TOTAL HARDNESS
								NON-CARBONATE HARDNESS
								FLUORIDATION STATUS

GROUND AND SURFACE
43 PPM
17 PPM
FLUORIDATED IN 1953

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	WF
LT 1	202	178	48	50	270	276	311	266	41	64	311	266	41	64			311	266
1-4	857	770	206	187	890	903	1066	971	187	215	1066	971	187	215			1066	971
5-9	666	653	191	192	924	942	1201	1210	295	315	1201	1210	295	315			1201	1210
10-14	514	561	166	181	909	868	1201	1182	354	293	1201	1182	354	293			1201	1182
15-19	899	585	153	200	779	684	1023	1023	271	271	1023	1023	271	271			1023	1023
20-24	1973	1122	179	214	1467	1164	3103	1978	201	320	3103	1978	201	320			3103	1978
25-29	1331	1133	188	223	1080	932	1637	1558	215	252	1637	1558	215	252			1637	1558
30-34	855	845	176	194	864	809	197	198	197	197	864	809	197	198			864	809
35-39	700	821	180	192	817	859	808	859	124	198	808	859	124	198			808	859
40-44	663	716	170	196	686	788	871	906	175	182	871	906	175	182			871	906
45-49	566	612	130	155	630	804	796	906	147	169	796	906	147	169			796	906
50-54	415	506	120	158	598	690	700	862	125	169	700	862	125	169			700	862
55-59	350	454	97	108	501	622	618	823	131	133	618	823	131	133			618	823
60-64	302	401	72	97	345	488	526	780	112	157	526	780	112	157			526	780
65-69	226	354	53	66	308	476	407	652	74	141	407	652	74	141			407	652
70-74	180	259	44	56	218	394	307	525	37	73	307	525	37	73			307	525
75-79*	188	296	24	52	188	296	24	52	33	71	188	296	33	71			188	296
80-84*	0	0	0	0	48	175	56	268	10	34	48	175	56	268			48	175
85-UP	26	68	5	16	48	132	56	209	10	29	48	132	56	209			48	132
TOTALS	10913	10336	2202	2518	11548	12282	16449	16392	2748	3291	16449	16392	2748	3291			16449	16392
GRAND TOTAL				2569						38880								

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM	WF	1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	242	260	502	502	292	331	315	938	401	396	330	1127
CV-RFNL	134	161	295	295	163	182	166	511	199	200	163	562
HEART	93	115	208	208	111	114	112	337	137	129	107	373
NON CV-R	108	99	207	207	129	149	149	427	202	196	167	565
CANCER	33	37	70	70	44	52	52	148	76	67	66	209

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	CODE
VIRGINIA	
1950 RANK BY POPULATION	
466	
1950 POP/SQ. MILE	4058
1970 POP/SQ. MILE	3738
1949 MED. FAM. INCOME	2974
1969 MED. FAM. INCOME	9231
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	36
JULY MEAN TEMPERATURE	76
LAND RESOURCE REGION	44
MEAN ANNUAL PRECIPITATION	S
WATER SOURCE	10
TOTAL HARDNESS	10
NON-CARBONATE HARDNESS	UNCERTAIN
FLUORIDATION STRIUS	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT 1	233	218	168	108
1-4	555	542	461	456
5-9	839	783	475	506
10-14	695	694	438	455
15-19	604	1068	441	470
20-24	960	1422	402	532
25-29	1280	1369	385	420
30-34	1018	1104	309	425
35-39	925	1061	359	479
40-44	803	949	338	417
45-49	683	844	270	387
50-54	650	710	223	301
55-59	470	644	193	213
60-64	358	475	118	169
65-69	281	416	125	164
70-74	183	319	65	84
75-79#	149	318	51	91
80-84#	0	0	0	0
85-Up	17	49	12	27
TOTALS	11093	13390	4763	5800
GRAND TOTAL				35666

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

CAUSE	1949		49-50		1959-60		1961		1961		1961	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
ALL CAUSES	335	100	340	100	475	100	470	100	456	100	456	100
CIRCULATORY	173	51.6	190	55.9	268	56.4	268	57.0	255	55.9	255	55.9
CORONARY	113	33.7	130	38.2	243	51.2	243	51.7	235	51.5	235	51.5
HEART	113	33.7	130	38.2	243	51.2	243	51.7	235	51.5	235	51.5
NON-CV-R	162	48.4	212	61.8	374	78.8	374	79.3	201	44.1	201	44.1
CANCER	34	10.1	48	14.1	82	17.4	71	15.1	56	12.3	56	12.3

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS		CODE
STATE	VIRGINIA	
1950 BANK BY POPULATION	345	
1950 POP/SQ. MILE	5749	
1970 POP/SQ. MILE	2778	
1949 MED. F.M. INCOME	3005	
1969 MED. F.M. INCOME	8263	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA BANK	-	
JAN MEAN TEMPERATURE	40	
JULY MEAN TEMPERATURE	79	
MEAN ANN. PRECIPITATION	41	
LAND RESOURCE REGION	P	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	36 PPM	
NON-CARBONATE HARDNESS	5 PPM	
FLUORIDATION STATUS	FLUORIDATED	

FLUORIDATED IN 1953

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	WF	WM	WF	NM	NF	WM	WF
TOTAL	16892	20355	4736	5744	19923	23742	5143	5982	18623	22809	5758	6893	18623	22809	5758	6893	18623	22809
GRAND TOTAL				47727				54790				54083						

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	950.0	1782.0	1963.0	840.0	1705.4	1982.5	1.131	1.045	0.990
CV-RENAL	522.0	1055.0	1084.0	477.9	951.6	1162.5	1.109		
HEART	355.0	720.0	767.0	310.3	655.6	793.8	1.098		
NON CV-R	428.0	727.0	879.0	392.2	753.8	826.0	1.091		
CANCER	129.0	246.0	309.0	130.8	259.2	295.5	0.987		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CODE

STATE	VIRGINIA
1950 RANK BY POPULATION	246
1950 POP/SQ. MILE	3535
1970 POP/SQ. MILE	2155
1949 MED. FAM. INCOME	2949
1969 MED. FAM. INCOME	8855
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	37
JULY MEAN TEMPERATURE	76
MEAN ANNUAL PRECIPITATION	39
LAND RESOURCE REGION	P
WATER SOURCE	SURFACE
TOTAL HARDNESS	15 gpm
NON-CARCINOGENIC HARDNESS	2 gpm
FLUORIDATION STATUS	FLOUORIDATED IN 1951

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			1960		
	WM	WF	NP	WM	WF	NP
IT 1	217	203	152	896	911	580
1-4	951	836	775	3577	3414	2234
5-9	972	933	831	3650	3561	2468
10-14	735	787	720	3304	3152	2033
15-19	763	897	559	3714	2688	1611
20-24	1085	1087	570	4917	2718	1284
25-29	1201	1157	814	3024	2723	1289
30-34	1161	1026	781	3041	2624	1376
35-39	1607	943	864	3015	3049	1545
40-44	942	856	710	2765	2489	1368
45-49	798	710	579	2584	2054	1171
50-54	711	619	548	1731	1553	833
55-59	335	521	335	1266	1198	623
60-64	372	423	252	923	915	445
65-69	310	359	252	628	781	372
70-74	222	272	107	378	577	215
75-79*	170	213	86	235	352	141
80-84*	0	0	0	122	255	59
85-up	26	35	13	66	132	44
TOTALS	12181	11877	8878	39496	35106	19260
GRAND TOTAL						19800
						113662

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
TOTAL			
OBSERVED	961.0	2633.0	2823.0
EXPECTED*	684.0	2368.6	3052.6
OBS/EXP	1.405	1.112	0.925
CV-RENAL			
OBSERVED	464.0	1273.0	1315.0
EXPECTED*	334.0	1682.6	1530.4
OBS/EXP	1.389	1.176	0.859
HEART			
OBSERVED	315.0	918.0	961.0
EXPECTED*	228.9	744.4	1047.7
OBS/EXP	1.376	1.233	0.917
NON CV-R			
OBSERVED	497.0	1360.0	1508.0
EXPECTED*	350.0	1286.0	1522.2
OBS/EXP	1.429	1.058	0.991
CANCER			
OBSERVED	112.0	363.0	501.0
EXPECTED*	102.0	333.5	446.9
OBS/EXP	1.098	1.088	1.121

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

CAUSE	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	1950 RANK BY POPULATION	VIRGINIA
TOTAL	529	432	961	846	884	903	2633	929	924	970	2823	1950 POP./SQ. MILE	10685	
CV-BENAL	262	242	464	405	433	435	1273	436	425	454	1315	1970 POP./SQ. MILE	2000	
HEART	171	144	315	292	323	303	918	301	316	344	961	1949 MED. FAM. INCOME	2799	
NON CV-R	267	230	497	441	451	468	1360	493	499	516	1508	1969 MED. FAM. INCOME	9325	
CANCER	55	57	112	105	131	127	363	171	172	158	501	URBAN CLASS	INDEPENDENT	
												1950 URBAN AREA RANK	-	
												JAN MEAN TEMPERATURE	39	
												JULY MEAN TEMPERATURE	83	
												MEAN ANN. PRECIPITATION	46	
												LAND RESOURCE REGION	S	
												WATER SOURCE	SURFACE	
												TOTAL HARDNESS	68 PPM	
												NON-CARBONATE HARDNESS	20 PPM	
												FLUORIDATION STATUS	FLUORIDATED	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	1583	1413	669	722	3125	3065	1086	1116	2139	1942	913	852
1-4	5840	5531	2613	2265	10703	10299	4541	4666	6113	6149	3854	3917
5-9	4463	4362	2608	2562	10680	10582	4882	4733	8401	7977	5410	5442
10-14	3694	2901	2206	2304	8828	9587	3586	3743	11939	11793	5223	5405
15-19	10574	3502	2059	2175	14538	9459	2760	2895	16633	9568	5368	4339
20-24	17655	5950	2972	2731	19253	9499	2759	2517	34659	12662	5368	4339
25-29	10486	7109	3356	3251	8923	7591	2758	2893	9835	7007	2398	2928
30-34	7944	5802	2962	2666	8855	6411	2918	3072	7008	4966	2495	2572
35-39	5846	3905	2600	2326	6572	5341	2151	2215	5739	4500	2150	2291
40-44	4745	3016	2140	2187	5307	4477	1746	1986	5342	5177	2232	2615
45-49	3242	3980	1910	1680	4297	4277	1546	1720	5037	5037	2236	2357
50-54	2718	2845	1261	1180	3648	3967	1506	1720	3759	4312	1718	2001
55-59	2170	2333	886	769	2952	3385	1104	1285	3014	3706	1352	1663
60-64	1482	1332	650	629	2216	2809	931	1078	2198	3169	1065	1461
65-69	901	1343	372	425	1468	2240	635	740	1574	2556	725	928
70-74	813	1268	287	351	833	1299	333	396	944	1730	423	542
75-79*	0	0	0	0	371	799	156	176	447	1112	223	318
80-84#	99	209	32	83	232	447	90	136	290	765	187	267
85-UP												
TOTALS	87269	62796	31213	32235	121681	103570	39167	41454	120566	94503	45885	46997
GRAND TOTAL				213513				305872				307951

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS
BY CAUSE AND YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	1583	1413	669	722	3125	3065	1086	1116	2139	1942	913	852
1-4	5840	5531	2613	2265	10703	10299	4541	4666	6113	6149	3854	3917
5-9	4463	4362	2608	2562	10680	10582	4882	4733	8401	7977	5410	5442
10-14	3694	2901	2206	2304	8828	9587	3586	3743	11939	11793	5223	5405
15-19	10574	3502	2059	2175	14538	9459	2760	2895	16633	9568	5368	4339
20-24	17655	5950	2972	2731	19253	9499	2759	2517	34659	12662	5368	4339
25-29	10486	7109	3356	3251	8923	7591	2758	2893	9835	7007	2398	2928
30-34	7944	5802	2962	2666	8855	6411	2918	3072	7008	4966	2495	2572
35-39	5846	3905	2600	2326	6572	5341	2151	2215	5739	4500	2150	2291
40-44	4745	3016	2140	2187	5307	4477	1746	1986	5342	5177	2232	2615
45-49	3242	3980	1910	1680	4297	4277	1546	1720	5037	5037	2236	2357
50-54	2718	2845	1261	1180	3648	3967	1506	1720	3759	4312	1718	2001
55-59	2170	2333	886	769	2952	3385	1104	1285	3014	3706	1352	1663
60-64	1482	1332	650	629	2216	2809	931	1078	2198	3169	1065	1461
65-69	901	1343	372	425	1468	2240	635	740	1574	2556	725	928
70-74	813	1268	287	351	833	1299	333	396	944	1730	423	542
75-79*	0	0	0	0	371	799	156	176	447	1112	223	318
80-84#	99	209	32	83	232	447	90	136	290	765	187	267
85-UP												
TOTALS	87269	62796	31213	32235	121681	103570	39167	41454	120566	94503	45885	46997
GRAND TOTAL				213513				305872				307951

CITY CHARACTERISTICS		CODE	
STATE	VIRGINIA	48	
1950 RANK BY POPULATION	48		
1950 POP./SQ. MILE	7571		
1970 POP./SQ. MILE	5855		
1949 MED. FAM. INCOME	3097		
1969 MED. FAM. INCOME	7821		
URBAN CLASS	CENTRAL		
1950 URBAN AREA RANK	35		
JAN MEAN TEMPERATURE	47		
JULY MEAN TEMPERATURE	77		
MEAN PRECIPITATION	43		
LAND RESOURCES REGION	T		
WATER SOURCE	SURFACE		
TOTAL HARNESS	74 RPM		
NON-CARBONATE HARDNESS	31 DPM		
FLUORIDATION STATUS	FLUORIDATED IN 1952		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	3946.0	7483.0	7604.0	
	3077.3	6778.2	7546.9	
	1.282	1.104	1.007	
CV-RENEWAL				
OBSERVED	2039.0	3816.0	3869.0	
EXPECTED*	1463.1	3245.5	3895.4	
OBS/EXP	1.394	1.176	0.993	
HEART				
OBSERVED	1365.0	2589.0	2773.0	
EXPECTED*	1011.0	2238.8	2653.4	
OBS/EXP	1.350	1.156	1.045	
NON CV-R				
OBSERVED	1907.0	3667.0	3735.0	
EXPECTED*	1614.3	3532.6	3654.5	
OBS/EXP	1.181	1.038	1.022	
CANCER				
OBSERVED	456.0	1132.0	1271.0	
EXPECTED*	454.8	976.6	1089.8	
OBS/EXP	1.003	1.159	1.166	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM			NM			WM			NM			WM			NM		
	W	F	T	W	F	T	W	F	T	W	F	T	W	F	T	W	F	T
IT 1	459	415	415	381	1519	1575	858	829	625	563	621	580	621	580	363	409		
1-4	1721	1648	1519	1575	1648	1519	3146	2958	2272	2380	2172	2069	2172	2069	1768	1866		
5-9	1611	1610	1545	1545	1553	1553	3354	3309	2558	2665	2922	2777	2922	2777	2724	2824		
10-14	1259	1212	1095	1168	1212	1095	3259	3252	2055	2113	2928	2744	3048	2744	3048	3170		
15-19	3888	1310	863	998	1258	1366	4642	2868	1467	1499	3261	2790	3261	2790	2396	2587		
20-24	5548	1897	1258	1366	1897	1258	5531	2632	1120	1152	2799	3363	3299	3363	1228	1715		
25-29	3030	2020	1716	1652	2020	1716	2868	2316	1038	1263	2440	2348	2440	2348	1021	1317		
30-34	2375	1771	1398	1421	1398	1421	2901	2421	1301	1469	1850	1781	1850	1781	927	1260		
35-39	1894	1658	1171	1223	1658	1171	2850	2694	1556	1723	1512	1603	1512	1603	1064	1284		
40-44	1533	1561	898	952	1533	1561	2361	2352	1325	1338	1756	2039	1756	2039	1242	1464		
45-49	1261	1272	808	858	1261	1272	2046	2234	1063	1128	2090	2364	2090	2364	1427	1594		
50-54	1176	1177	719	735	1176	1177	1801	1801	744	821	2053	2224	2053	2224	1427	1594		
55-59	949	912	556	495	949	912	1376	1472	646	726	1705	1968	1705	1968	894	953		
60-64	679	761	373	339	679	761	1163	1284	547	551	1412	1642	1412	1642	555	745		
65-69	498	617	314	362	498	617	913	1714	334	462	913	1714	913	1714	328	462		
70-74	368	487	176	186	368	487	270	433	247	283	845	1031	845	1031	368	487		
75-79	261	427	152	158	261	427	163	283	141	174	100	662	100	662	105	111		
80-84	43	62	0	0	43	62	68	151	42	52	119	274	119	274	61	115		
85-UP																		
TOTALS	28553	20757	14965	15764	20757	14965	40045	35047	19199	20482	31907	34090	31907	34090	21015	23951		
GRAND TOTAL				80039						114773						110963		

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1464.0	2896.0	3296.0	1464.0	2896.0	3296.0	1464.0	2896.0	3296.0
CV-RENAL	762.0	1529.0	1698.0	762.0	1529.0	1698.0	762.0	1529.0	1698.0
HEART	483.0	1038.0	1202.0	483.0	1038.0	1202.0	483.0	1038.0	1202.0
NON CV-R	702.0	1367.0	1598.0	702.0	1367.0	1598.0	702.0	1367.0	1598.0
CANCER	145.0	415.0	559.0	145.0	415.0	559.0	145.0	415.0	559.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR										CITY CHARACTERISTICS										CODE							
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	PLUORIDATION STATUS	FLUORIDATED IN 1952
TOTAL	754	710	1464	794	1071	1031	2896	1086	1095	1115	3296	VIRGINIA	141	7847	3826	2816	8280	CENTRAL	35	39	83	46	U	11	23	23	FLUORIDATED IN 1952	
CV-RENAL	396	366	762	418	576	535	1529	523	578	597	1698																	
HEART	249	234	483	295	396	347	1038	368	419	415	1202																	
NON CV-R	358	344	702	376	495	496	1367	563	517	518	1598																	
CANCER	80	65	145	131	147	137	415	205	152	202	559																	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	WF	NM	NF
LT-1	821	733	164	175
1-4	3097	2839	607	681
5-9	2990	2857	648	651
10-14	2364	2273	518	537
15-19	2173	2732	461	553
20-24	2875	3689	508	617
25-29	3515	3650	572	734
30-34	2909	3135	514	576
35-39	2681	3072	504	644
40-44	2586	3144	481	571
45-49	2535	2818	473	568
50-54	2325	2484	476	450
55-59	1769	1992	294	335
60-64	1413	1578	239	268
65-69	1155	1378	174	205
70-74	662	961	109	118
75-79	687	932	81	117
80-84			0	0
85-UP	94	160	18	17
TOTALS	36852	40477	6841	7751
GRAND TOTAL				91931

1960	NP	NM	NP	NM
	734	770	770	205
	3178	2953	780	813
	3845	3600	988	1017
	3471	3377	813	857
	2381	2883	551	671
	1964	2621	325	437
	2381	2632	342	586
	2753	2991	469	537
	2921	3092	534	611
	2441	2807	451	613
	2402	2650	481	569
	2138	2703	406	434
	2042	2470	363	468
	1814	2232	318	354
	1337	1843	247	338
	951	1362	158	207
	629	954	86	112
	268	498	28	36
	154	326	22	38
	37804	42764	7639	8903
				97110

1970	WM	WF	NM	NP
	538	534	205	184
	1907	2043	783	774
	2838	2747	911	955
	3139	2990	986	968
	2972	3100	874	967
	2709	3491	549	789
	2389	2336	442	550
	1759	1769	377	440
	1689	1984	362	507
	2064	2416	569	569
	2281	2657	457	531
	2077	2476	474	494
	2383	2363	354	419
	1705	2462	329	469
	1458	2216	303	428
	1190	1889	235	272
	723	1349	111	190
	402	759	57	90
	213	512	45	73
	1190	39977	8281	9667
				92115

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE		1949-50	1959-61	1969-71
TOTAL				
OBSERVED		1752.0	3110.0	3737.0
EXPECTED*		1578.1	2965.7	3571.9
OBS/EXP		1.110	1.049	1.061
CV-RENAL				
OBSERVED		926.0	1691.0	1861.0
EXPECTED*		828.0	1639.5	2066.0
OBS/EXP		1.118	1.031	0.901
HEART				
OBSERVED		573.0	1123.0	1231.0
EXPECTED*		584.8	1148.2	1426.2
OBS/EXP		0.980	0.978	0.863
NON CV-R				
OBSERVED		326.0	1419.0	1876.0
EXPECTED*		750.1	1326.2	1455.9
OBS/EXP		1.101	1.070	1.289
CANCER				
OBSERVED		257.0	462.0	602.0
EXPECTED*		252.2	470.7	539.7
OBS/EXP		1.019	0.982	1.116

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE
LT 1	336	317	1	2	325	333	270	9	332	270	16	9
1-4	1342	1317	4	5	1219	1276	45	33	1039	998	31	27
5-9	1277	1302	7	5	1523	1507	28	32	1288	1290	48	46
10-14	1069	1060	9	6	1480	1503	19	15	1360	1381	41	41
15-19	994	1194	4	8	1243	1503	21	24	2089	2691	87	109
20-24	1197	1292	4	4	1042	1214	21	23	2824	2999	77	96
25-29	1165	1231	7	5	928	815	18	19	1377	1158	39	33
30-34	1141	1182	2	5	894	970	6	12	855	755	25	18
35-39	1100	1259	3	4	922	1027	11	6	674	729	18	27
40-44	1112	1123	1	7	994	1076	9	8	808	896	14	13
45-49	1007	1028	2	3	939	1094	2	6	808	977	10	15
50-54	887	948	3	3	901	987	3	4	936	983	13	9
55-59	853	988	3	3	908	999	3	5	924	1003	5	9
60-64	843	893	1	2	729	903	4	2	744	983	6	7
65-69	749	879	0	3	726	916	1	1	680	867	6	4
70-74	609	679	0	2	624	786	1	1	554	787	3	2
75-79*	635	721	1	1	472	613	1	2	404	725	3	2
80-84*	0	0	0	0	255	350	0	0	298	447	3	1
85-UP	127	135	0	1	146	201	0	1	196	360	2	1
TOTALS	16443	17548	52	69	16270	18013	202	203	18162	20299	445	469
GRAND TOTAL				34112				34688				39375

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	891.0	1366.0	1462.0		847.2	1384.3	1556.9		847.2	1384.3	1556.9	
					1.052	0.987	0.939		1.052	0.987	0.939	
CV-RENAL	493.0	827.0	853.0		501.6	833.8	957.8		493.0	827.0	853.0	
					0.592	0.992	0.891		0.592	0.992	0.891	
HEART	277.0	507.0	577.0		354.6	584.9	660.3		277.0	507.0	577.0	
					0.781	0.935	0.674		0.781	0.935	0.674	
NON CV-F	398.0	539.0	609.0		395.6	550.5	599.2		398.0	539.0	609.0	
					1.152	0.979	1.016		1.152	0.979	1.016	
CANCER	134.0	218.0	251.0		133.2	224.5	1.118		134.0	218.0	251.0	
					1.006	1.025	1.118		1.006	1.025	1.118	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949				1959				1969				1970				1971				1972			
	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE	WM	WF	NM	NE
TOTAL	443	448	891	448	444	443	479	1366	511	479	472	1462	511	479	472	1462	511	479	472	1462	511	479	472	1462
CV-RENAL	238	255	493	238	269	284	274	827	304	284	265	853	304	284	265	853	304	284	265	853	304	284	265	853
HEART	142	135	277	142	177	178	192	547	199	199	179	577	199	199	179	577	199	199	179	577	199	199	179	577
NON CV-F	205	193	398	205	175	159	205	539	175	159	205	609	175	159	205	609	175	159	205	609	175	159	205	609
CANCER	73	61	134	73	84	53	81	218	91	72	88	251	91	72	88	251	91	72	88	251	91	72	88	251

CITY CHARACTERISTICS

STATE	WASHINGTON			
	1950	1960	1970	1971
1950 RANK BY POPULATION	357	357	357	357
1950 POP/50. MILE	1624	1624	1624	1624
1970 POP/50. MILE	1893	1893	1893	1893
1949 MED. FAM. INCOME	3264	3264	3264	3264
1969 MED. FAM. INCOME	9424	9424	9424	9424
URBAN CLASS	INDEPENDENT	INDEPENDENT	INDEPENDENT	INDEPENDENT
1950 URBAN AREA RANK	41	41	41	41
JAN MEAN TEMPERATURE	60	60	60	60
JULY MEAN TEMPERATURE	33	33	33	33
MEAN ANN. PRECIPITATION	A	A	A	A
LAND RESOURCE REGION	SURFACE	SURFACE	SURFACE	SURFACE
WATER SOURCE	16 PPM	16 PPM	16 PPM	16 PPM
TOTAL HARDNESS	NO CARBONATE	NO CARBONATE	NO CARBONATE	NO CARBONATE
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL	NO ARTIFICIAL, LOW NATURAL

EVERETT
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POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NP	WM	WF	NM	NP
LT-1	335	361	1	2	403	389	5	10
1-4	1436	1413	8	6	1628	1603	41	28
5-9	1343	1299	8	5	1865	1841	27	33
10-14	1782	1170	11	0	1829	1878	26	21
15-19	952	1045	1	1	1391	1547	11	16
20-24	1038	1153	6	6	1132	1169	21	23
25-29	1112	1214	8	9	953	922	17	22
30-34	1169	1286	11	6	1029	1097	15	20
35-39	1171	1229	3	2	1144	1252	11	15
40-44	1146	1162	5	4	1205	1371	13	7
45-49	1037	1039	6	3	1306	1332	8	9
50-54	945	959	4	4	1156	1189	5	5
55-59	893	946	3	3	1068	1046	8	7
60-64	861	875	8	5	872	970	3	5
65-69	740	818	2	1	795	958	5	0
70-74	551	604	2	1	675	795	2	1
75-79#	524	581	0	1	477	640	1	1
80-84#	0	0	0	0	257	334	1	0
85-UP	90	115	5	2	111	206	1	0
TOTALS	16425	17269	89	66	19321	20539	221	223
GRAND TOTAL				33849				40304

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1969-71			
	1949	1950	SUM	49-50	1959	1960	1961	59-61	1969	1970	1971	SUM
TOTAL	464	483	947		480	537	535	1552	666	616	635	1917
CV-RENAL	260	293	553		295	349	333	977	368	343	344	1055
HEART	152	177	329		190	229	215	634	229	237	242	708
NON CV-R	204	190	394		185	188	202	575	298	273	291	862
CANCER	58	66	124		68	88	77	233	113	106	103	322

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
		947.0	767.8	1.233		1552.0	1462.1	1.061		1917.0	1969.9	0.973
CV-RENAL		553.0	443.8	1.246		977.0	862.4	1.133		1055.0	1184.5	0.891
		329.0	316.5	1.040		634.0	609.8	1.040		708.0	824.6	0.859
HEART		329.0	316.5	1.040		634.0	609.8	1.040		708.0	824.6	0.859
NON CV-R		394.0	324.1	1.216		575.0	599.7	0.959		862.0	785.4	1.098
		394.0	324.1	1.216		575.0	599.7	0.959		862.0	785.4	1.098
CANCER		124.0	123.4	1.005		233.0	229.6	1.015		322.0	293.9	1.096

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	RANK BY POPULATION	POP/50. MILE	POP/50. MILE	MED. FAM. INCOME	MED. FAM. INCOME	URBAN CLASS	URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS	CODE
WASHINGTON	359	4396	18.40	3427	10176	INDEPENDENT	38	61	32	A	SURFACE	12 PPM	NO ARTIFICIAL, LOW NATURAL			

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950						1960						1970					
	WM	WP	NM	NP	WM	WP	WM	WP	NM	NP	WM	WP	WM	WP	NM	NP	WM	NP
TOTAL	15990	15630	1308	1315	18294	4727	4928	4727	634	674	3252	3078	3252	3078	753	699	11357	10690
1-4	10598	14396	940	555	20814	20743	20614	20743	2701	2597	11357	10690	11357	10690	2587	2578	15054	14371
5-9	10598	14396	940	555	20814	20743	20614	20743	2701	2597	11357	10690	11357	10690	3491	3483	16553	15875
10-14	12079	11859	720	687	16145	18074	1284	1473	1284	1473	18843	20254	18843	20254	3061	3172	23909	28123
15-19	17417	16981	1240	1216	16822	17830	1308	1488	1308	1488	19003	16812	19003	16812	2987	3508	23909	28123
20-24	19209	19067	1836	1682	15899	13824	1663	1656	1663	1656	19003	16812	19003	16812	254	2515	19003	16812
25-29	17460	17649	1541	1273	15046	14504	1737	1948	1737	1948	19131	10451	19131	10451	2054	2023	19131	10451
30-34	16707	17425	1484	966	16640	17896	2073	2150	2073	2150	9965	9501	9965	9501	1734	1925	9965	9501
35-39	15708	16212	1307	638	16885	18077	1717	1484	1717	1484	11470	11939	11470	11939	1928	2193	11470	11939
40-44	14711	14809	1057	538	17059	18028	1515	1110	1515	1110	13775	15362	13775	15362	2088	2240	13775	15362
45-49	13562	14164	764	569	15523	16474	1419	774	1419	774	14404	16238	14404	16238	1703	1582	14404	16238
50-54	12686	13133	515	394	13920	14763	1137	627	1137	627	14022	15914	14022	15914	1509	1177	14022	15914
55-59	11881	11659	588	277	11577	13363	725	569	725	569	12041	14241	12041	14241	1347	856	12041	14241
60-64	9672	9922	455	207	10054	12400	487	445	487	445	8819	11931	8819	11931	991	637	8819	11931
65-69	6003	6822	304	134	8414	10420	498	295	498	295	6640	10483	6640	10483	499	575	6640	10483
70-74	5156	6637	186	91	5627	7168	352	149	352	149	4810	8354	4810	8354	293	381	4810	8354
75-79#	0	0	0	0	2640	3961	161	75	161	75	3066	5616	3066	5616	230	229	3066	5616
80-84#	0	0	0	0	1341	2197	60	53	60	53	2002	3739	2002	3739	156	156	2002	3739
85-UP	863	1195	24	18	248191	262368	24204	22324	24204	22324	220898	242972	220898	242972	33495	33466	220898	242972
TOTALS	218326	222098	15348	11819	467591	557067	557067	557067	557067	557067	557067	557067	557067	557067	557067	557067	557067	557067

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	11469.0	19509.0	19273.0		9619.6	19194.9	20967.0		9619.6	19194.9	20967.0	
CV-RENAL	6006.0	10747.0	10152.0		5364.8	11007.1	12542.7		5364.8	11007.1	12542.7	
HEART	4186.0	7461.0	7201.0		3849.6	7853.3	8693.6		3849.6	7853.3	8693.6	
NON CV-R	5463.0	8762.0	9121.0		4255.8	8187.8	8171.4		4255.8	8187.8	8171.4	
CANCER	1799.0	3332.0	3371.0		1583.4	3044.7	3163.1		1583.4	3044.7	3163.1	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR										CITY CHARACTERISTICS										CODE								
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM	STATE	1950 RANK BY POPULATION	1950 POP/SQ. MILE	1970 POP/SQ. MILE	1949 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE		JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS	WASHINGTON
TOTAL	5721	5748	11469	6549	6545	6415	19509	6554	6395	6324	19273	19	19	6604	6350	3947	2516	11037	20	40	65	31	A	SURFACE	18 PPM	0 PPM	FLUORIDATED IN 1969		
CV-RENAL	2982	3024	6006	3601	3623	3523	10747	3497	3351	3324	10152							CENTRAL											
HEART	2122	2064	4186	2449	2585	2427	7461	2516	2321	2364	7201																		
NON CV-R	2739	2724	5463	2948	2922	2892	8762	3057	3064	3000	9121																		
CANCER	867	932	1799	1118	1089	1125	3332	1113	1154	1104	3371																		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	HF	NM	NP	WM	HF	NM	NP	WM	HF	NM	NP
LT 1	1766	1718	28	24	2046	1929	77	75	1385	1408	56	56
1-4	6938	6650	114	126	7744	7455	300	281	4989	4691	195	225
5-9	6255	6044	109	96	8915	8690	265	268	6990	6754	293	281
10-14	4727	4688	77	72	7847	7641	210	202	7930	7491	297	301
15-19	3971	4850	55	73	5392	6710	119	154	7671	8285	285	306
20-24	5016	6320	104	127	4707	5817	125	151	6601	7567	221	255
25-29	6518	7010	161	144	4926	4935	189	194	4838	4898	157	159
30-34	6306	6290	140	124	4840	5297	127	173	3414	3712	104	108
35-39	5786	5901	120	82	5459	5963	145	168	3406	3733	117	146
40-44	5279	5223	101	58	5565	5815	160	137	3957	4610	107	166
45-49	4569	4697	93	61	5285	5590	134	82	4545	5282	161	168
50-54	4283	4424	84	85	4821	4881	106	66	4702	5195	133	135
55-59	3958	4145	57	48	4300	4347	94	58	4431	4883	116	90
60-64	3997	3872	77	40	3534	4035	72	68	3949	4581	88	66
65-69	3584	3510	77	26	3357	3982	51	52	3114	3855	81	59
70-74	2460	2570	44	23	3021	3502	48	32	2482	3536	41	60
75-79*	2319	2455	21	12	2198	2603	41	21	1901	2942	26	36
80-84*	0	0	0	0	1684	1379	12	13	1253	2077	20	21
85-UP	417	501	6	5	622	862	7	8	868	1433	22	19
TOTALS	78159	80868	1468	1226	85667	91433	2282	2226	78406	86933	2520	2657
GRAND TOTAL				161721				181608				170516

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	3692.0	3694.0	6394.0		6394.0	6705.0	7034.2		6705.0	7034.2	0.953	
CV-RENAL	2066.0	3703.0	3670.0		3703.0	4308.7	4308.7		4308.7	4308.7	0.852	
HEART	1440.0	2690.0	2628.0		2690.0	2986.8	2986.8		2986.8	2986.8	0.880	
NON CV-R	1626.0	2691.0	3035.0		2691.0	2723.5	1.114		2723.5	1.114		
CANCER	516.0	953.0	1109.0		953.0	1043.2	1.063		1043.2	1.063		

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY CAUSE AND YEAR

CAUSE	1950				1959				1969				1971			
	WM	HF	NM	NP	WM	HF	NM	NP	WM	HF	NM	NP	WM	HF	NM	NP
TOTAL	1941	1751	3692	1261	2198	2097	2099	6394	2275	2180	2250	6705	2250	2180	2250	6705
CV-RENAL	1077	989	2066	1267	1267	1187	1249	3703	1213	1181	1276	3670	1276	1181	1276	3670
HEART	745	695	1440	836	918	870	902	2690	870	836	922	2628	922	836	922	2628
NON CV-R	864	762	1626	931	931	910	850	2691	1062	999	974	3035	974	999	974	3035
CANCER	274	242	516	314	314	323	316	953	407	346	356	1109	356	346	356	1109

CITY CHARACTERISTICS

STATE	WASHINGTON	
	1950 RANK BY POPULATION	62
1950 POP/50. MILE	3697	
1970 POP/50. MILE	3357	
1949 MED. FAM. INCOME	3746	
1969 MED. FAM. INCOME	9137	
URBAN CLASS	CENTRAL	
1950 URBAN AREA RANK	70	
JAN MEAN TEMPERATURE	24	
JULY MEAN TEMPERATURE	69	
MEAN ANN. PRECIPITATION	14	
LAND RESOURCE REGION	B	
WATER SOURCE	GROUND	
TOTAL HARDNESS	156 PPM	
NON-CARBONATE HARDNESS	15 PPM	
FLUORIDATION STATUS	NO ARTIFICIAL, LOW NATURAL	

POPULATION												DEATHS AND DEATH RATIOS					
BY AGE, RACE, SEX AND CENSUS YEAR												BY CAUSE AND CENSUS PERIOD					
AGE GROUP	1950				1960				1970				CAUSE	1949-50	1959-61	1969-71	
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	WF					
IT 1	1543	1486	77	97	1453	1423	160	181	1191	1163	168	171	TOTAL	OBSERVED	3308.0	5501.0	5764.0
1-4	6119	6033	270	252	5633	5381	609	639	4536	4369	619	662	EXPECTED*	2934.3	5066.4	5589.1	
5-9	5607	5666	165	206	6933	6713	581	522	6432	6052	948	957	OBS/EXP	1.127	1.086	1.031	
10-14	4121	3961	129	148	6375	6509	395	395	6659	6385	959	1020	CV-RENAL				
15-19	3694	4101	104	164	4507	5266	193	263	6056	6511	768	778	OBSERVED	1812.0	3199.0	3208.0	
20-24	4741	5440	186	269	3639	4128	327	350	5667	6473	555	610	EXPECTED*	1644.3	2919.6	3321.5	
25-29	5568	5908	296	328	3760	3624	321	354	4739	4426	408	457	OBS/EXP	1.102	1.096	0.966	
30-34	5601	5472	251	226	3880	4220	236	352	3299	3391	343	440	NON CV-R				
35-39	5182	5219	175	158	4326	4733	252	324	3174	3311	344	523	HEART				
40-44	4459	4533	134	90	4486	4626	246	241	3513	3927	412	532	OBSERVED	1224.0	2276.0	2297.0	
45-49	4151	4140	103	74	4294	4582	144	150	4114	4208	313	257	EXPECTED*	1175.6	2067.0	2308.9	
50-54	3891	4069	83	70	3887	4092	133	86	3589	3972	208	196	OBS/EXP	1.041	1.101	0.995	
55-59	3616	3687	59	41	3513	3718	90	83	3065	3715	147	116	NON CV-R				
60-64	3313	3400	58	38	3032	3546	64	70	2418	3235	102	112	OBSERVED	1496.0	2302.0	2556.0	
65-69	2921	2917	37	32	2761	3365	50	45	1844	2978	46	90	EXPECTED*	1290.1	2146.8	2267.6	
70-74	1952	2110	37	13	2302	2939	49	35	1453	2307	21	48	OBS/EXP	1.160	1.072	1.127	
75-79#	1749	2088	22	23	1624	1975	25	19	887	1503	23	33	CANCER				
80-84#	0	0	0	5	805	1059	12	3	561	1003	19	31					
85-UP	317	431	7	5	387	610	4	6	67111	73190	6828	7452					
TOTALS	68585	70661	2193	2234	67597	72509	3831	4042									
GRAND TOTAL				143673			147979					154581					
# AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED																	
* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES																	
CITY CHARACTERISTICS												CODE					
STATE												WASHINGTON					
1950 RANK BY POPULATION												65					
1950 POP./SQ. MILE												2999					
1970 POP./SQ. MILE												3241					
1949 MED. FAM. INCOME												3594					
1969 MED. FAM. INCOME												9537					
URBAN CLASS												CENTRAL					
1950 URBAN AREA RANK												76					
JAN MEAN TEMPERATURE												37					
JULY MEAN TEMPERATURE												63					
MEAN ANN. PRECIPITATION												33					
LAND RESOURCE REGION												A					
WATER SOURCE												GROUND AND SURFACE					
TOTAL HARDNESS												21 PPM					
NON-CARBONATE HARDNESS												0 PPM					
FLUORIDATION STATUS												NO ARTIFICIAL, LOW NATURAL					

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NF	WM	WP	NM	NF	WM	WP	NM	NF
IT 1	545	520	13	19	300	283	7	5	410	355	6	5
1-4	2141	2109	69	72	1240	1202	20	22	1464	1373	40	33
5-9	2018	1916	66	71	1475	1575	44	26	1774	1825	34	34
10-14	1409	1931	46	52	1518	1486	46	30	1849	1846	32	31
15-19	1123	1317	28	26	1200	1260	22	29	1755	1938	39	37
20-24	1354	1782	25	41	718	929	13	9	1657	2144	48	52
25-29	1894	2060	44	57	787	778	17	12	1498	1414	51	30
30-34	1792	1751	59	40	787	986	13	26	1021	1061	26	23
35-39	1542	1484	55	35	866	1105	16	27	900	965	19	19
40-44	1364	1267	35	25	1053	1186	18	20	1061	1154	16	20
45-49	1058	1083	43	17	1047	1175	13	11	1165	1323	27	16
50-54	926	985	17	10	842	889	11	15	1163	1231	21	22
55-59	823	785	17	10	856	712	9	10	1004	1231	19	18
60-64	623	729	6	2	656	712	5	10	922	1031	15	18
65-69	569	573	1	0	537	733	4	1	673	986	5	7
70-74	365	448	1	0	408	639	2	0	502	709	5	4
75-79	382	405	0	0	354	454	2	2	319	672	3	7
80-84	0	0	0	0	172	251	2	1	232	485	0	4
85-UP	66	81	1	0	89	121	0	2	158	312	0	4
TOTALS	20086	20597	500	481	15269	16701	264	230	19587	22145	386	375
GRAND TOTAL				41664				32464				42493

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	660.0	1189.0	1.019		660.0	1189.0	1.019		660.0	1189.0	1.019	
CV-RENAL	368.0	678.0	0.907		368.0	678.0	0.907		368.0	678.0	0.907	
HEART	220.0	483.0	0.902		220.0	483.0	0.902		220.0	483.0	0.902	
NON CV-R	352.0	511.0	1.142		352.0	511.0	1.142		352.0	511.0	1.142	
CANCER	126.0	192.0	1.242		126.0	192.0	1.242		126.0	192.0	1.242	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	1959	1960	1961	1969	1970	1971	SUM	SUM	SUM	SUM
TOTAL	323	337	397	403	389	501	525	528	1554	1554	1554	1554
CV-RENAL	166	162	221	235	222	276	288	290	854	854	854	854
HEART	101	119	150	166	167	196	215	203	614	614	614	614
NON CV-R	177	175	176	168	167	225	237	238	700	700	700	700
CANCER	65	61	62	66	64	84	109	90	283	283	283	283

CITY CHARACTERISTICS

CODE

STATE	WASHINGTON
1950 RANK BY POPULATION	287
1950 POP/SQ. MILE	4902
1970 POP/SQ. MILE	3541
1949 MED. FAM. INCOME	3492
1969 MED. FAM. INCOME	9815
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	23
JAN MEAN TEMPERATURE	38
JULY MEAN TEMPERATURE	66
MEAN ANN. PRECIPITATION	37
LAND RESOURCE REGION	A
WATER SOURCE	GROUND
TOTAL HARDNESS	55 PPM
NON-CARBONATE HARDNESS	45 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1963

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	400	433	10	16	394	408	8	24	358	336	16	27
1-4	1610	1583	46	43	1785	1587	68	85	1287	1225	80	87
5-9	1479	1520	32	30	2191	2072	67	89	1674	1506	104	137
10-14	1207	1244	31	35	2073	2045	47	96	1663	1450	115	103
15-19	1119	1380	35	24	1454	1527	46	32	1475	1663	72	92
20-24	1072	1436	36	26	1383	1790	32	23	1475	1663	61	62
25-29	1355	1528	37	37	1862	1736	31	40	1324	1335	47	43
30-34	1396	1454	39	28	1263	1236	31	50	957	992	43	39
35-39	1316	1293	40	20	1293	1436	41	37	885	1011	47	39
40-44	1349	1293	40	20	1311	1436	39	39	1033	1193	40	41
45-49	1046	1088	24	22	1247	1356	34	30	1171	1368	41	51
50-54	953	986	16	11	1148	1235	30	36	1225	1318	51	47
55-59	819	894	11	11	1024	1157	23	17	1167	1356	42	35
60-64	819	894	11	11	916	1059	19	10	1023	1178	35	38
65-69	747	822	8	9	832	997	12	10	862	1099	26	15
70-74	551	577	5	4	681	920	13	11	670	1046	17	26
75-79*	521	542	5	3	473	652	2	5	528	788	6	10
80-84*	0	0	0	0	261	331	3	2	337	576	12	6
85-UP	94	99	2	1	149	172	2	2	232	412	2	2
TOTALS	18119	19538	444	385	20181	21894	594	615	20519	23173	925	971
GRAND TOTAL				38486				43284				45588

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	1020.0	1655.0	1.295	782.4	1522.8	1.083	1936.0	1936.0	1.034
CV-RENAL	562.0	970.0	1.269	442.9	896.8	1.082	1106.0	1106.0	0.930
HEART	397.0	630.0	1.254	316.6	633.6	0.994	790.0	790.0	0.960
NON CV-R	458.0	685.0	1.329	344.5	631.0	1.086	892.0	892.0	1.202
CANCER	139.0	253.0	1.097	126.7	241.5	1.048	338.0	338.0	1.185

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR				OBSERVED DEATHS BY CAUSE AND YEAR			
	1949	1950	49-50	59-61	1949	1950	49-50	59-61	1949	1950	49-50	59-61
TOTAL	501	519	1020	1655	549	549	1020	1655	672	651	1298	1998
CV-RENAL	282	280	562	970	349	349	704	1106	365	365	730	1106
HEART	210	210	420	630	257	257	514	970	265	265	530	970
NON CV-R	219	239	458	685	291	291	582	1046	308	285	574	892
CANCER	62	77	139	253	84	84	168	317	104	111	222	338

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP/50. MILE	1970 POP/50. MILE	1949 MED. FAM. INCOME	1949 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANN. PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS
WASHINGTON	311	4013	3999	3539	3539	6480	INDEPENDENT	26	71	7	B	SURFACE	21 PPM	0 PPM	NO ARTIFICIAL, LOW NATURAL

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	MM	NF	WM	WF	MM	NF	WM	WF	MM	NF
1-4	700	629	72	52	802	793	99	94	425	422	63	52
5-9	2510	2393	235	221	3052	2979	417	356	1572	1498	288	233
10-14	2357	2354	222	224	3655	3683	462	490	2364	2222	396	387
15-19	2645	1979	204	235	3474	3387	350	352	2764	2764	428	358
20-24	1800	2438	226	248	2365	2924	247	281	2809	3085	372	554
25-29	2465	3502	250	242	2071	2817	204	240	2106	2770	212	339
30-34	2980	3442	242	259	2195	2466	170	220	1707	1844	167	224
35-39	2688	2974	243	274	2448	2895	183	285	1469	1703	168	185
40-44	2598	2941	261	376	2584	3018	201	276	1426	1841	136	163
45-49	2133	2682	266	322	2537	2894	220	263	1936	2337	143	215
50-54	2144	2345	274	323	2390	2792	226	297	2057	2462	160	230
55-59	1859	2016	255	290	2240	2612	235	288	2028	2386	165	218
60-64	1584	1603	197	198	1920	2211	243	278	1812	2267	185	222
65-69	1197	1256	149	151	1566	1823	217	239	1621	2024	158	222
70-74	936	1001	131	112	1162	1470	169	206	1153	1729	146	217
75-79	564	730	60	65	812	1123	130	145	805	1349	142	174
80-84	483	672	47	52	545	713	66	84	545	959	82	107
85-UP	0	0	0	0	261	410	34	35	313	575	41	72
TOTALS	31311	35066	3342	3782	36211	41251	3887	4447	29193	34604	3486	4222
GRAND TOTAL				73501				85796				71505

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1581.0	1178.2	1.342		2733.0	2463.2	1.110		3018.0	2603.4	1.159	
CV-RENEWAL												
OBSERVED	710.0				1513.0				1608.0			
EXPECTED*	615.0				1353.3				1536.3			
OBS/EXP	1.154				1.118				1.073			
HEART												
OBSERVED	488.0				1122.0				1265.0			
EXPECTED*	439.0				955.5				1070.3			
OBS/EXP	1.112				1.174				1.182			
NON CV-R												
OBSERVED	871.0				1220.0				1370.0			
EXPECTED*	563.9				1109.9				1067.1			
OBS/EXP	1.546				1.099				1.284			
CANCER												
OBSERVED	216.0				409.0				548.0			
EXPECTED*	193.8				374.2				412.3			
OBS/EXP	1.115				1.030				1.329			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	WM	WF	MM	NF	WM	WF	MM	NF	WM	WF	MM	NF
TOTAL	706	835	1581	710	888	869	976	2733	3018	2733	3018	3018
CV-RENEWAL	395	385	710	395	470	494	549	1513	559	566	559	1648
HEART	235	253	488	235	342	348	432	1122	431	431	437	1365
NON CV-R	441	450	871	475	416	375	427	1220	435	478	435	1370
CANCER	55	121	216		125	127	157	409	185	191	185	548

CITY CHARACTERISTICS

STATE	WEST VIRGINIA	
	1950 RANK BY POPULATION	159
1950 POP./SQ. MILE	7656	
1970 POP./SQ. MILE	2629	
1949 MED. FAM. INCOME	9321	
1969 MED. FAM. INCOME	9321	
URBAN CLASS	CENTRAL	
1950 URBAN AREA RANK	95	
JAN MEAN TEMPERATURE	36	
JULY MEAN TEMPERATURE	75	
MEAN ANN. PRECIPITATION	45	
LAND RESOURCE REGION	N	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	32 PPM	
NON-CARBONATE HARDNESS	17 PPM	
FLUORIDATION STATUS	FLUORIDATED IN 1954	

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	221	219	11	14	237	215	12	14	145	162	17	18
2	1052	1077	78	87	892	854	64	64	586	622	71	53
3	977	956	71	104	1040	1064	99	76	800	771	78	78
4	900	839	80	68	1049	1077	85	76	932	892	69	78
5	767	1051	63	66	883	1035	51	76	1275	1320	81	74
6	1084	1049	58	77	851	896	23	36	1024	1226	60	49
7	1180	1385	46	59	609	7143	19	32	656	667	21	58
8	1033	1214	43	56	728	931	24	42	465	560	29	39
9	1009	1131	45	60	883	1069	35	40	472	614	24	35
10	832	1035	41	79	807	984	33	62	753	799	23	33
11	846	893	68	80	800	936	40	47	765	916	34	39
12	793	821	76	62	713	914	42	61	750	986	19	44
13	552	585	38	28	726	832	60	78	601	882	34	56
14	453	492	33	20	638	693	77	50	661	829	33	55
15	297	373	15	20	491	571	55	46	480	692	45	62
16	297	373	15	20	383	457	24	22	396	537	47	38
17	265	339	13	8	251	367	23	18	265	386	24	23
18	0	C	0	0	124	191	5	6	167	261	11	11
19	0	0	0	0	63	110	5	6	83	187	8	11
20	36	58	3	3	63	110	5	6	83	187	8	11
TOTALS	12945	14597	805	959	11968	13879	776	854	11229	13269	728	867
GRAND TOTAL				29346				27477				26093

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

[illegible]

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	850	773	34	30	768	655	55	60	537	502	43	36
1-4	3125	3089	154	162	2944	2792	196	196	1765	1716	123	126
5-9	3178	3145	175	178	3433	3390	243	243	2429	2409	244	225
10-14	2611	2746	158	163	3212	3276	208	201	2725	2643	233	240
15-19	2611	3188	107	160	2744	3307	134	146	3276	3767	230	264
20-24	3376	4082	141	182	2433	2864	105	142	3166	3656	158	153
25-29	3448	3853	151	184	2426	2393	115	129	1875	1905	88	112
30-34	3091	3403	142	165	2425	2686	107	165	1554	1684	86	122
35-39	2756	3224	150	199	2553	3016	128	161	1495	1770	79	128
40-44	2613	2985	143	223	2431	2725	129	148	1921	2201	117	130
45-49	2401	2796	156	211	2270	2745	127	177	2064	2555	108	137
50-54	2242	2520	158	152	2215	2539	137	192	2005	2393	106	139
55-59	1923	2003	131	113	1884	2447	142	157	1800	2326	103	132
60-64	1450	1760	94	85	1692	2116	128	133	1673	2183	102	172
65-69	1283	1398	88	90	1411	1742	125	123	1291	1979	93	137
70-74	779	936	40	37	950	1397	69	85	1031	1653	78	97
75-79*	703	975	40	33	722	973	59	53	699	1205	44	67
80-84*	0	0	0	0	337	552	15	26	368	726	22	41
85-UP	110	173	8	16	203	313	16	14	271	539	8	35
TOTALS	38851	43049	2070	2383	36891	41930	2238	2568	31945	37812	2065	2493
GRAND TOTAL				86353				83627				74315

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1959-61				1970				69-71	
	1949	1950	SUM	49-50	1959	1960	1961	SUM	1969	1970	1971	SUM	SUM	SUM
TOTAL	917	891	1808		922	895	932	2749	948	1029	957	2934		
CV-RENAL	431	425	856		533	522	516	1576	561	516	509	1586		
HEART	295	282	577		358	372	369	1099	338	335	371	1044		
NON CV-R	486	466	952		400	362	411	1173	387	513	448	1348		
CANCER	127	124	251		150	118	163	431	142	176	174	492		

CITY CHARACTERISTICS

CODE

STATE		WEST VIRGINIA	
1950 RANK BY POPULATION	130	1950 RANK BY POPULATION	130
1950 POP/50. MILE	6168	1950 POP/50. MILE	6168
1970 POP/50. MILE	5055	1970 POP/50. MILE	5055
1949 MED. FAM. INCOME	3054	1949 MED. FAM. INCOME	3054
1969 MED. FAM. INCOME	7963	1969 MED. FAM. INCOME	7963
URBAN CLASS	CENTRAL	URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	77	1950 URBAN AREA RANK	77
JAN MEAN TEMPERATURE	38	JAN MEAN TEMPERATURE	38
JULY MEAN TEMPERATURE	76	JULY MEAN TEMPERATURE	76
MEAN ANN. PRECIPITATION	41	MEAN ANN. PRECIPITATION	41
LAND RESOURCE REGION	N	LAND RESOURCE REGION	N
WATER SOURCE	SURFACE	WATER SOURCE	SURFACE
TOTAL HARDNESS	72 PPM	TOTAL HARDNESS	72 PPM
NON-CARBONATE HARDNESS	50 PPM	NON-CARBONATE HARDNESS	50 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1953	FLUORIDATION STATUS	FLUORIDATED IN 1953

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	1808.0	2749.0	2934.0	OBSERVED*	1449.2
TOTAL	EXPECTED*	1449.2	2687.6	2916.3	OBS/EXP	1.248
						1.023
CV-RENAL	OBSERVED	856.0	1576.0	1586.0	EXPECTED*	780.0
	EXPECTED*	780.0	1537.1	1756.3	OBS/EXP	1.097
						1.025
HEART	OBSERVED	577.0	1099.0	1044.0	EXPECTED*	557.4
	EXPECTED*	557.4	1083.9	1220.5	OBS/EXP	1.035
						1.014
NON CV-R	OBSERVED	952.0	1173.0	1348.0	EXPECTED*	669.1
	EXPECTED*	669.1	1150.5	1160.0	OBS/EXP	1.423
						1.020
CANCER	OBSERVED	251.0	431.0	492.0	EXPECTED*	237.8
	EXPECTED*	237.8	431.3	449.5	OBS/EXP	1.056
						1.094

POPULATION
BY AGE-RACE-SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	287	211	2	6	196	187	6	7	184	189	7	3
1-4	695	826	15	13	623	657	19	22	564	569	23	22
5-9	729	710	13	12	774	723	19	31	757	720	28	25
10-14	645	602	14	10	757	720	20	17	816	747	34	36
15-19	1214	1097	17	15	1622	1271	14	16	2881	2387	64	56
20-24	2632	1726	22	19	1856	1257	23	16	3838	2955	68	45
25-29	1644	1153	17	15	748	552	23	15	907	774	51	37
30-34	920	878	15	10	521	610	15	18	543	522	29	20
35-39	732	815	12	13	590	682	11	12	493	488	32	21
40-44	576	672	14	13	609	642	11	12	501	677	16	21
45-49	618	697	17	16	536	638	11	14	637	692	15	20
50-54	573	601	16	14	419	586	10	16	536	641	9	10
55-59	535	547	8	12	458	600	16	17	500	622	10	13
60-64	417	436	10	8	397	502	15	19	358	547	5	7
65-69	342	379	11	9	380	466	12	10	311	499	10	19
70-74	286	250	4	3	267	338	8	9	244	452	15	10
75-79	221	287	3	2	188	264	8	3	206	304	8	7
80-84	0	0	0	0	91	136	4	4	111	206	1	1
85-UP	33	61	2	0	50	91	2	0	92	149	2	2
TOTALS	13169	11950	212	194	11082	10922	244	239	14449	14180	427	375
GRAND TOTAL				25428				22487				29431

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE		1949-50	1959-61	1969-71
TOTAL	OBSERVED	481.6	731.0	752.0
	EXPECTED*	401.4	663.4	805.4
	OBS/EXP	1.198	1.102	0.934
CV-RENAL	OBSERVED	245.6	426.0	423.0
	EXPECTED*	214.5	377.9	467.7
	OBS/EXP	1.142	1.127	0.904
HEART	OBSERVED	150.6	288.0	309.0
	EXPECTED*	153.1	266.7	324.0
	OBS/EXP	0.980	1.080	0.954
NON CV-R	OBSERVED	236.0	305.0	329.0
	EXPECTED*	186.9	337.6	337.6
	OBS/EXP	1.263	1.069	0.975
CANCER	OBSERVED	75.0	135.0	121.0
	EXPECTED*	63.5	104.6	119.2
	OBS/EXP	1.181	1.290	1.015

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

49-50

CITY CHARACTERISTICS

CITY CHARACTERISTICS	CODE	WEST VIRGINIA
STATE		
1950 RANK BY POPULATION	472	5005
1950 POP./SQ. MILE	4393	
1970 POP./SQ. MILE	3154	
1949 MED. F.M. INCOME	8598	
1969 MED. F.M. INCOME		
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	29	
JULY MEAN TEMPERATURE	77	
MEAN ANNUAL PRECIPITATION	43	
LAND RESOURCE REGION	N	
WATER SOURCE	SURFACE	
TOTAL HARDNESS	76 PPM	
NON-CARCINOGEN HARDNESS	62 PPM	
FLUORIDATION STATUS	FLUORIDATED	

NON-CARBONATE HARDNESS
FLUORIDATION STATUS
FLUORIDATED IN 1961

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

[illegible]

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

	OBSERVED DEATHS BY CAUSE AND YEAR							CITY CHARACTERISTICS			CODE		
	1949	1950	49-50 SUM	1959	1960	1961	59-61 SUM	1969	1970	1971	59-71 SUM	STATE 1950 RANK BY POPULATION	WEST VIRGINIA
CAUSE													
TOTAL	423	433	856	507	485	516	1508	592	592	517	1701	1950 POP./SQ. MILE	5357
CV-PENAL	196	241	437	314	309	319	942	345	321	292	958	1970 POP./SQ. MILE	4056
HEART	132	152	284	212	205	223	640	258	229	215	702	1949 MED. FAM. INCOME	3864
NON CV-R	227	192	419	193	176	197	566	247	271	225	743	1969 MED. FAM. INCOME	8548
CANCER	73	60	133	62	62	76	200	86	83	103	272	URBAN CLASS	INDEPENDENT
												1950 URBAN AREA RANK	-
												JAN MEAN TEMPERATURE	34
												JULY MEAN TEMPERATURE	75
												MEAN ANN. PRECIPITATION	39
												LAND RESOURCE REGION	N
												WATER SOURCE	GROUND
												TOTAL HARDNESS	216 PPM
												NON-CARBONATE HARDNESS	142 PPM
												FLUORIDATION STATUS	UNCERTAIN

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
IT 1	530	467	24	18	461	508	20	24	323	340	24	14
1-4	2055	1989	88	97	1939	1831	85	76	1251	1201	77	83
5-9	2022	1994	84	89	2266	2254	111	93	1762	1700	108	106
10-14	1833	1836	70	67	2073	2055	104	108	2006	1977	105	127
15-19	1643	1961	48	80	1561	1856	68	76	2035	2263	106	103
20-24	1838	2853	59	82	1163	1559	42	52	1552	1950	47	62
25-29	2146	2433	55	73	1232	1415	40	46	1117	1151	42	50
30-34	1976	2349	42	70	1555	1703	51	51	951	1054	31	58
35-39	2068	2293	61	99	1586	1826	38	55	926	1145	40	43
40-44	1831	2159	65	84	1508	1898	35	63	1348	1475	42	56
45-49	1723	1969	71	75	1594	1893	40	64	1409	1585	42	56
50-54	1685	1772	82	60	1469	1730	59	55	1322	1743	33	53
55-59	1495	1697	47	50	1316	1604	47	52	1136	1663	35	60
60-64	1368	1369	43	43	1202	1529	43	44	1133	1534	36	44
65-69	1139	1323	45	45	1175	1303	28	32	949	1380	37	97
70-74	722	887	25	13	844	1068	34	32	546	1210	20	23
75-79	620	887	18	21	303	462	22	12	368	541	19	13
80-84	400	400	0	0	116	291	7	15	182	362	5	11
85-UP	101	203	2	2	116	291	7	15	182	362	5	11
TOTALS	26765	30098	929	1079	23986	27566	878	970	21182	25085	867	1054
GRAND TOTAL				58891				53400				48188

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1431.0	1200.8	1.192		2457.0	1974.3	1.143		2270.0	1986.9	1.141	
CV-RENAL	795.0	679.6	1.170		1374.0	1162.2	1.182		1250.0	1208.6	1.036	
HEART	528.0	485.0	1.089		963.0	820.1	1.174		868.0	843.3	1.029	
NON CV-R	636.0	521.2	1.220		883.0	780.3	1.087		1020.0	883.0	1.157	
CANCER	225.0	197.1	1.141		374.0	314.9	1.188		441.0	309.6	1.424	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1949-50				1959-61				1969-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	699	732	1431		765	743	749	2257	768	801	701	2270
CV-RENAL	383	412	795		485	442	447	1374	411	434	405	1250
HEART	260	268	528		311	311	341	963	289	292	287	868
NON CV-R	316	320	636		280	301	302	883	357	367	296	1020
CANCER	115	110	225		133	121	120	374	140	168	133	441

CITY CHARACTERISTICS

CODE

STATE	WEST VIRGINIA
1950 RANK BY POPULATION	199
1950 POP/SQ. MILE	5663
1970 POP/SQ. MILE	3623
1949 MED. FAM. INCOME	3125
1969 MED. FAM. INCOME	8575
URBAN CLASS	CENTRAL
1950 URBAN AREA RANK	116
JAN MEAN TEMPERATURE	30
JULY MEAN TEMPERATURE	74
MEAN ANN. PRECIPITATION	37
LAND RESOURCE REGION	N
WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	128 PPM
NON-CARBONATE HARDNESS	105 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1950

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	411	366	1	0	682	613	1	1
1-4	1505	1417	0	0	2332	2438	4	4
5-9	1420	1402	3	0	4838	2765	4	4
10-14	1121	1122	1	3	4230	3256	5	3
15-19	1131	1293	0	0	3284	3088	26	22
20-24	1243	1293	0	0	2093	2592	26	20
25-29	1149	1355	2	1	1687	1804	16	14
30-34	1169	1335	0	1	1512	1546	8	12
35-39	1177	1232	1	1	1416	1499	5	10
40-44	1111	1242	1	0	1560	1654	10	4
45-49	1032	1131	0	0	1529	1617	7	6
50-54	949	997	1	0	1265	1503	3	5
55-59	795	898	1	1	1215	1290	2	5
60-64	591	747	1	1	1002	1230	1	6
65-69	489	637	0	0	737	1033	0	2
70-74	336	486	0	1	605	936	2	2
75-79*	352	465	1	0	373	652	3	1
80-84*	0	0	0	0	243	409	2	3
85-UP	63	91	0	1	148	310	0	0
TOTALS	16171	17807	16	16	23160	25165	40	46
GRAND TOTAL				34010				48411

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP
TOTAL	621.0	1191.0	1289.0	1606.1	0.786	
CV-RENAL	346.0	687.0	702.0	956.6	0.734	
HEART	221.0	468.0	481.0	671.2	0.717	
NON CV-R	275.0	504.0	587.0	683.4	0.859	
CANCER	91.0	191.0	239.0	253.3	0.943	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS			
	1949	1950	49-50	59-61	1969	1970	1971	69-71
TOTAL	322	299	621	1191	437	429	423	1289
CV-RENAL	172	174	346	687	223	243	236	702
HEART	116	111	154	468	163	161	157	481
NON CV-R	150	125	275	504	214	186	187	587
CANCER	49	42	60	76	82	74	83	239
STATE								
1950 POP/1000								
1950 POP/1000								
1970 POP/1000								
1949 MED. FAM. INCOME								
1969 MED. FAM. INCOME								
URBAN CLASS								
1950 URBAN AREA RANK								
JAN MEAN TEMPERATURE								
JULY MEAN TEMPERATURE								
MEAN ANN. PRECIPITATION								
LAND RESOURCE REGION								
WATER SOURCE								
TOTAL HARDNESS								
NON-CARBONATE HARDNESS								
FLUORIDATION STATUS								

FLUORIDATED IN 1950

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950			
	WM	SP	NM	NP
IT 1-4	270	272	16	19
5-9	1052	1079	51	65
10-14	1045	1094	67	54
15-19	903	866	68	68
20-24	978	1054	64	52
25-29	1152	1198	68	50
30-34	1108	1097	54	65
35-39	1001	1065	61	55
40-44	968	1059	44	44
45-49	964	964	39	45
50-54	890	895	48	46
55-59	826	841	43	41
60-64	734	813	29	27
65-69	676	676	17	22
70-74	530	552	17	12
75-79*	330	413	10	9
80-84*	269	445	7	0
85-89*	42	89	0	0
TOTALS	13763	14424	717	686
GRAND TOTAL				29590

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

CAUSE	1949			1950			1959			1960			1961			SUM	OBSERVED DEATHS BY CAUSE AND YEAR	59-66
TOTAL	264			285			549			331		339		368		1086		
CV-RENAL	161			163			328			186		277		281		854		
HEART	111			121			232			123		166		140		460		
NON CV-R	103			118			221			135		152		163		462		
CANCER	32			45			77			52		70		62		181		

OBSERVED DEATHS
BY CAUSE AND YEAR

	1969	1970	1971	69-71 SUM
1	375	343	358	1076
2	198	201	200	599
3	127	130	140	397
4	177	142	158	477
5	69	71	68	208

CITY CHARACTERISTICS

STATE	STATE BANK BY POPULATION	WISCONSIN
1930 POP. SO. WILE	5165	
1970 POP. SO. WILE	2791	
1930 MED. FAL. INCOME	3697	
1970 MED. FAL. INCOME	10391	
1950 CLASS	INDEPENDENT	
USFO UPGAN AREA RANK	-	
JAN MEAN TEMPERATURE	20	
JULY MEAN TEMPERATURE	73	
MEAN ANN. PRECIPITATION	33	
LAND RESOURCE REGION	I	
WATER SOURCE	GROUND	
TOTAL HAFNESS	295 PPM	
NON-CARBONATE HARDNESS	26 PPM	
FLUORIDATION STATUS	FLUORIDED	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH PATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1959-71
TOTAL			
OBSERVED	549.0	1088.0	1076.0
EXPECTED*	565.2	992.9	1073.3
OBS/EXP	0.971	1.096	1.003
CV-RENAL			
OBSERVED	328.0	628.0	599.0
EXPECTED*	313.4	554.7	615.8
OBS/EXP	1.047	1.132	0.973
HEART			
OBSERVED	232.0	419.0	397.0
EXPECTED*	224.1	393.4	431.4
OBS/EXP	1.035	1.065	0.920
NON CV-P			
OBSERVED	221.0	460.0	457.0
EXPECTED*	251.8	438.3	477.5
OBS/EXP	0.878	1.050	1.043
CANCER			

CANCER

NON-CARBONATE HARDNESS	26 PPM	FLUORIDATION STATUS	FLUORIDATED IN 1949
1	10	1	1
2	10	1	1
3	10	1	1
4	10	1	1
5	10	1	1
6	10	1	1
7	10	1	1
8	10	1	1
9	10	1	1
10	10	1	1
11	10	1	1
12	10	1	1
13	10	1	1
14	10	1	1
15	10	1	1
16	10	1	1
17	10	1	1
18	10	1	1
19	10	1	1
20	10	1	1
21	10	1	1
22	10	1	1
23	10	1	1
24	10	1	1
25	10	1	1
26	10	1	1
27	10	1	1
28	10	1	1
29	10	1	1
30	10	1	1
31	10	1	1
32	10	1	1
33	10	1	1
34	10	1	1
35	10	1	1
36	10	1	1
37	10	1	1
38	10	1	1
39	10	1	1
40	10	1	1
41	10	1	1
42	10	1	1
43	10	1	1
44	10	1	1
45	10	1	1
46	10	1	1
47	10	1	1
48	10	1	1
49	10	1	1
50	10	1	1
51	10	1	1
52	10	1	1
53	10	1	1
54	10	1	1
55	10	1	1
56	10	1	1
57	10	1	1
58	10	1	1
59	10	1	1
60	10	1	1
61	10	1	1
62	10	1	1
63	10	1	1
64	10	1	1
65	10	1	1
66	10	1	1
67	10	1	1
68	10	1	1
69	10	1	1
70	10	1	1
71	10	1	1
72	10	1	1
73	10	1	1
74	10	1	1
75	10	1	1
76	10	1	1
77	10	1	1
78	10	1	1
79	10	1	1
80	10	1	1
81	10	1	1
82	10	1	1
83	10	1	1
84	10	1	1
85	10	1	1
86	10	1	1
87	10	1	1
88	10	1	1
89	10	1	1
90	10	1	1
91	10	1	1
92	10	1	1
93	10	1	1
94	10	1	1
95	10	1	1
96	10	1	1
97	10	1	1
98	10	1	1
99	10	1	1
100	10	1	1

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50	1959-61	1969-71
1. <i>Chlamydia trachomatis</i>	100	100	100
2. <i>Neisseria gonorrhoeae</i>	100	100	100
3. <i>Haemophilus ducreyi</i>	100	100	100
4. <i>Herpes simplex virus</i>	100	100	100
5. <i>Mycoplasma genitalium</i>	100	100	100
6. <i>Ureaplasma urealyticum</i>	100	100	100
7. <i>Trichomonas vaginalis</i>	100	100	100
8. <i>Candida albicans</i>	100	100	100
9. <i>Streptococcus pyogenes</i>	100	100	100
10. <i>Staphylococcus aureus</i>	100	100	100
11. <i>Pseudomonas aeruginosa</i>	100	100	100
12. <i>Escherichia coli</i>	100	100	100
13. <i>Salmonella enteritidis</i>	100	100	100
14. <i>Shigella flexneri</i>	100	100	100
15. <i>Yersinia enterocolitica</i>	100	100	100
16. <i>Campylobacter jejuni</i>	100	100	100
17. <i>Legionella pneumophila</i>	100	100	100
18. <i>Mycobacterium tuberculosis</i>	100	100	100
19. <i>Coccidioides immitis</i>	100	100	100
20. <i>Histoplasma capsulatum</i>	100	100	100
21. <i>Blastomyces dermatitidis</i>	100	100	100
22. <i>Cryptosporidium parvum</i>	100	100	100
23. <i>Isospora belli</i>	100	100	100
24. <i>Cyclospora cayentensis</i>	100	100	100
25. <i>Toxoplasma gondii</i>	100	100	100
26. <i>Microsporidium</i>	100	100	100
27. <i>Parasitosis</i>	100	100	100
28. <i>Other</i>	100	100	100

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

FLUORIDATION STATUS

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	14069	15845	16	6	15224	17437	27	31	16515	18863	52	85
GRAND TOTAL				29036				32719				35515

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBS/EXP	OBS/EXP	OBS/EXP
TOTAL	778.0	675.3	1.152	1.013	1.175.0	1.192.0
CV-RENAL	453.0	392.5	1.154	1.033	708.0	750.0
HEART	306.0	278.3	1.099	0.990	477.0	550.0
NON CV-R	325.0	282.7	1.156	0.983	467.0	442.0
CANCER	106.0	107.6	0.985	1.010	181.0	173.0

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	WISCONSIN	
	1950 RANK BY POPULATION	1950 RANK BY POP/50. MILE
1950 RANK BY POPULATION	399	5074
1950 RANK BY POP/50. MILE	3778	3778
1949 MED. FAM. INCOME	3550	3550
1969 MED. FAM. INCOME	10285	10285
URBAN CLASS	INDEPENDENT	INDEPENDENT
1950 URBAN AREA RANK	17	17
JAN MEAN TEMPERATURE	72	72
JULY MEAN TEMPERATURE	29	29
MEAN ANN. PRECIPITATION	1	1
LAND RESOURCE REGION	GROUND	GROUND
WATER SOURCE	401 PPM	401 PPM
TOTAL HARDNESS	196 PPM	196 PPM
NON-CARBONATE HARDNESS	FLUORIDATED IN 1950	FLUORIDATED IN 1950
FLUORIDATION STATUS		

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	639	612	6	3	863	811	6	11	823	804	12	12
1-4	2400	2278	9	13	3237	3153	32	32	3392	3163	47	38
5-9	2189	2208	7	8	3660	3594	45	38	4902	4577	60	64
10-14	1941	1883	10	8	2927	2938	35	28	4698	4521	69	49
15-19	1651	2061	7	15	2009	2445	26	28	4179	4743	59	55
20-24	1761	2247	16	11	1491	2034	14	18	3123	4201	32	54
25-29	1965	2088	17	6	1797	1910	17	16	2980	2922	32	37
30-34	1896	2054	3	6	1920	2028	13	22	2248	2221	22	26
35-39	1841	2039	2	5	1831	1988	13	19	2011	2150	24	26
40-44	1747	1843	6	3	1787	1964	14	16	2255	2366	23	25
45-49	1630	1760	6	1	1695	1918	7	12	2137	2333	23	21
50-54	1417	1494	3	3	1479	1621	7	9	2015	2318	17	16
55-59	1200	1347	3	3	1412	1607	12	8	1832	2199	11	22
60-64	1034	1125	1	4	1153	1348	8	8	1597	1900	11	15
65-69	802	945	1	5	956	1237	4	3	1232	1588	9	16
70-74	527	611	0	3	735	914	2	3	924	1288	11	9
75-79*	507	632	0	0	457	664	4	3	602	1037	6	2
80-84*	0	0	0	0	193	327	3	2	349	605	4	2
85-UP	79	97	1	C	113	178	0	1	199	430	2	6
TOTALS	25226	27324	88	97	29720	32629	262	277	41499	45366	445	499
GRAND TOTAL				52735				62888				87809

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	486	463	949		594	605	626	1825	761	687	769	2197
CV-RENEWAL	245	227	472		318	340	347	1005	422	395	416	1233
HEART	170	133	303		209	225	237	671	296	299	280	875
NON CV-R	241	236	477		276	265	279	820	319	292	353	964
CANCER	58	71	129		110	83	95	288	134	120	152	406

CITY CHARACTERISTICS

CODE

STATE		WISCONSIN	
1950 RANK BY POPULATION	2390	1950 RANK BY POPULATION	2390
1950 POP./SQ. MILE	3790	1950 POP./SQ. MILE	3790
1949 MED. FAM. INCOME	3591	1949 MED. FAM. INCOME	3591
1969 MED. FAM. INCOME	9375	1969 MED. FAM. INCOME	9375
URBAN CLASS	INDEPENDENT	URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-	1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	16	JAN MEAN TEMPERATURE	16
JULY MEAN TEMPERATURE	69	JULY MEAN TEMPERATURE	69
MEAN ANNUAL PRECIPITATION	26	MEAN ANNUAL PRECIPITATION	26
LAND RESOURCE REGION	1	LAND RESOURCE REGION	1
WATER SOURCE	GROUND AND SURFACE	WATER SOURCE	GROUND AND SURFACE
TOTAL HARDNESS	238 PPM	TOTAL HARDNESS	238 PPM
NON-CARBONATE HARDNESS	41 PPM	NON-CARBONATE HARDNESS	41 PPM
FLUORIDATION STATUS	UNCERTAIN	FLUORIDATION STATUS	UNCERTAIN

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	949.0	893.2	1.062	1825.0	1709.0	2197.0
CV-RENEWAL	472.0	480.0	0.983	1005.0	934.3	1439.4
HEART	303.0	346.1	0.875	671.0	668.4	1013.0
NON CV-R	477.0	413.2	1.154	820.0	774.7	1064.3
CANCER	129.0	146.6	0.880	288.0	273.7	388.1

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960			
	WM	WF	NH	NF	WM	WF	NH	NF
LT 1	617	525	1	4	932	805	18	28
1-4	2251	2265	9	7	3052	2944	74	76
5-9	2232	2130	5	10	3098	3424	65	64
10-14	1258	1602	11	7	3073	3001	46	44
15-19	1600	1692	10	8	2429	2306	32	30
20-24	1951	2028	19	18	2128	1860	45	43
25-29	2223	2325	23	9	1906	1879	44	46
30-34	2146	2225	8	8	2178	2174	44	52
35-39	1932	2013	10	3	2395	2429	55	25
40-44	1686	1785	12	6	2216	2285	26	21
45-49	1649	1725	7	8	1994	2024	16	15
50-54	1717	1726	9	7	1759	1759	16	15
55-59	1809	1543	7	8	1524	1614	16	14
60-64	1417	1269	4	3	1422	1452	8	6
65-69	966	971	3	3	1356	1344	5	8
70-74	596	634	2	0	884	1019	5	6
75-79#	496	610	1	1	524	608	1	4
80-84#	0	0	0	0	209	304	0	0
85-UP	57	100	0	0	105	149	1	1
TOTALS	27003	27110	145	110	33404	33480	517	498
GRAND TOTAL			54368				67899	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	TOTAL	OBSERVED EXPECTED*	TOTAL	OBSERVED EXPECTED*	TOTAL	OBSERVED EXPECTED*
CV-RENAL						
			1004.0	1893.0	1004.0	2198.0
			960.4	1861.9	960.4	2461.4
			1.045	1.017	1.045	0.915
HEART						
			407.0	746.0	407.0	902.0
			378.2	731.3	378.2	982.0
			1.076	1.020	1.076	0.919
NON CV-R						
			460.0	847.0	460.0	965.0
			442.6	850.4	442.6	1004.3
			1.039	0.996	1.039	0.961
CANCER						
			163.0	321.0	163.0	382.0
			163.1	305.9	163.1	370.5
			0.999	1.049	0.999	1.031

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	1959	1960	1961	SUM	69-71	SUM
TOTAL	473	531	643	600	650	1893	2198	2198
CV-RENAL	241	303	349	331	366	1046	1233	1233
HEART	183	224	246	230	270	746	902	902
NON CV-R	232	228	294	269	284	847	965	965
CANCER	71	52	108	104	109	321	382	382

CITY CHARACTERISTICS

CODE

STATE	WISCONSIN
1950 BANK BY POPULATION	212
1950 POP/50. MILE	7154
1970 POP/50. MILE	5752
1949 MED. FAM. INCOME	3758
1969 MED. FAM. INCOME	1019
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	22
JAN MEAN TEMPERATURE	77
MULTI YEAR PRECIPITATION	30
HEAD WIND VELOCITY	30
WATER RESERVE REGION	M
WATER SOURCE	SURFACE
TOTAL HARDNESS	132 GPM
NON-CARBONATE HARDNESS	26 GPM
FLUORIDATION STATUS	FLUORIDATED IN 1964

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	492	521	2	3	507	469	0	2	382	353	1	4
1-4	1972	1900	6	6	2019	1851	4	5	1433	1350	6	8
5-9	1949	1855	7	6	2327	2343	8	5	2082	2055	11	4
10-14	1681	1656	8	9	2154	2053	8	4	2384	2261	8	5
15-19	1538	2035	0	1	1715	2198	10	12	3019	3748	25	26
20-24	1643	2147	10	6	1316	1761	8	11	2333	3121	36	50
25-29	1692	1819	4	6	1271	1317	10	1	1338	1291	18	5
30-34	1636	1800	6	4	1239	1291	3	4	1016	1083	8	9
35-39	1557	1737	1	1	1278	1434	3	2	1070	1169	4	4
40-44	1551	1581	0	2	1303	1567	4	1	1192	1298	1	2
45-49	1328	1498	2	5	1331	1572	1	5	1277	1419	3	0
50-54	1385	1316	3	3	1330	1413	2	1	1228	1458	3	3
55-59	1604	1228	0	1	1124	1267	1	0	1159	1473	3	5
60-64	1604	1228	3	2	1187	1267	0	2	1817	1128	0	1
65-69	686	910	0	0	898	1158	0	1	1108	1109	3	2
70-74	565	671	0	1	698	915	0	1	746	1109	2	1
75-79*	497	763	0	1	399	657	0	0	501	852	0	0
80-84*	0	0	0	0	204	362	0	0	293	528	1	0
85-UP	105	172	0	0	94	219	0	0	152	354	0	0
TOTALS	22445	24984	52	54	22312	25144	62	57	23501	27392	131	129
GRAND TOTAL				47535				47575				51153

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	945.0	945.0	1.000		1504.0	1504.0	1.000		1513.0	1513.0	1.000	
CV-RENAL	567.0	567.0	1.000		897.0	897.0	1.000		832.0	832.0	1.000	
HEART	375.0	375.0	1.000		559.0	559.0	1.000		574.0	574.0	1.000	
NON CV-R	378.0	378.0	1.000		607.0	607.0	1.000		681.0	681.0	1.000	
CANCER	399.7	399.7	1.000		652.7	652.7	1.000		721.0	721.0	1.000	
	0.946	0.946	1.000		0.930	0.930	1.000		0.945	0.945	1.000	
	133.0	133.0	1.000		237.0	237.0	1.000		286.0	286.0	1.000	
	146.4	146.4	1.000		248.8	248.8	1.000		279.3	279.3	1.000	
	0.909	0.909	1.000		0.953	0.953	1.000		1.024	1.024	1.000	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	492	521	2	3	507	469	0	2	382	353	1	4
1-4	1972	1900	6	6	2019	1851	4	5	1433	1350	6	8
5-9	1949	1855	7	6	2327	2343	8	5	2082	2055	11	4
10-14	1681	1656	8	9	2154	2053	8	4	2384	2261	8	5
15-19	1538	2035	0	1	1715	2198	10	12	3019	3748	25	26
20-24	1643	2147	10	6	1316	1761	8	11	2333	3121	36	50
25-29	1692	1819	4	6	1271	1317	10	1	1338	1291	18	5
30-34	1636	1800	6	4	1239	1291	3	4	1016	1083	8	9
35-39	1557	1737	1	1	1278	1434	3	2	1070	1169	4	4
40-44	1551	1581	0	2	1303	1567	4	1	1192	1298	1	2
45-49	1328	1498	2	5	1331	1572	1	5	1277	1419	3	0
50-54	1385	1316	3	3	1330	1413	2	1	1228	1458	3	3
55-59	1604	1228	0	1	1124	1267	1	0	1159	1473	3	5
60-64	1604	1228	3	2	1187	1267	0	2	1817	1128	0	1
65-69	686	910	0	0	898	1158	0	1	1108	1109	3	2
70-74	565	671	0	1	698	915	0	1	746	1109	2	1
75-79*	497	763	0	1	399	657	0	0	501	852	0	0
80-84*	0	0	0	0	204	362	0	0	293	528	1	0
85-UP	105	172	0	0	94	219	0	0	152	354	0	0
TOTALS	22445	24984	52	54	22312	25144	62	57	23501	27392	131	129
GRAND TOTAL				47535				47575				51153

CITY CHARACTERISTICS

STATE	WISCONSIN
1950 RANK BY POPULATION	247
1950 POE/SQ. MILE	4527
1970 POE/SQ. MILE	3365
1949 MED. FAM. INCOME	3557
1969 MED. FAM. INCOME	9099
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	15
JULY MEAN TEMPERATURE	74
MEAN ANNU. PRECIPITATION	28
LAND RESOURCE REGION	H
WATER SOURCE	GROUND
TOTAL HARDNESS	242
NON-CARBONATE HARDNESS	48
FLUORIDATION STATUS	UNCERTAIN

MADISON
-470-

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	973	927	10	12	1618	1483	46	40	1472	1441	72	62
1-4	3435	3327	30	34	5744	5291	132	137	5301	5144	213	196
5-9	2970	2840	32	33	5712	5494	127	90	7310	7177	189	207
10-14	2268	2301	20	26	4567	4336	62	67	7269	6821	163	133
15-19	3611	4782	29	24	5446	6326	64	73	9554	10385	289	260
20-24	8072	4560	74	66	7630	7317	231	124	13617	15245	515	457
25-29	5672	4359	100	50	5286	4402	254	134	7631	7113	417	292
30-34	3318	3548	71	40	3887	3939	175	99	4630	4508	243	171
35-39	2855	3186	41	27	3827	3734	92	68	3834	3884	143	112
40-44	2552	2917	24	24	3157	3521	55	56	3770	4188	85	77
45-49	2399	2812	20	13	2919	3222	32	34	3874	3965	61	52
50-54	2253	2713	17	15	2562	3086	33	28	3165	3729	49	46
55-59	2057	2418	6	17	2387	2873	26	16	2756	3238	40	35
60-64	1622	1991	12	9	1994	2505	17	19	2262	2872	35	40
65-69	1211	1633	13	9	1597	2241	7	9	1681	2422	15	28
70-74	764	1171	4	6	1141	1695	7	10	1227	2069	10	22
75-79*	748	1138	6	6	715	1173	9	6	901	1581	12	12
80-84*	0	0	0	0	348	625	1	5	492	992	11	11
85-UP	172	248	4	1	184	370	2	1	290	657	9	7
TOTALS	46952	48171	519	414	60721	63597	1372	1016	81036	87431	2571	2220
GRAND TOTAL				96(56				126706				173258

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	1445.0	1544.3	0.936		1445.0	1544.3	0.936		1445.0	1544.3	0.936	
CV-RENAL	754.0	832.0	0.906		754.0	832.0	0.906		754.0	832.0	0.906	
HEART	546.0	593.3	0.920		546.0	593.3	0.920		546.0	593.3	0.920	
NON CV-R	691.0	712.3	0.970		691.0	712.3	0.970		691.0	712.3	0.970	
CANCER	224.0	248.0	0.903		224.0	248.0	0.903		224.0	248.0	0.903	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 RANK BY POPULATION	1970 POP./SQ. MILE	1969 MED. FAM. INCOME	1969 MED. FAM. INCOME	URBAN CLASS	1950 URBAN AREA RANK	JAN MEAN TEMPERATURE	JULY MEAN TEMPERATURE	MEAN ANNUAL PRECIPITATION	LAND RESOURCE REGION	WATER SOURCE	TOTAL HARDNESS	NON-CARBONATE HARDNESS	FLUORIDATION STATUS	CODE
WISCONSIN	114	6237	3572	3572	11385	11385	CENTRAL	112	19	73	30	I	GROUND	345 PPM	33 PPM	FLUORIDATED IN 1948	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	353	293	0	0	396	348	2	1	232	266	3	2
1-4	1203	1186	3	1	1466	1475	3	7	1090	986	5	3
5-9	1161	1130	2	1	1730	1687	6	4	1563	1542	8	14
10-14	893	906	4	3	1461	1466	5	7	1698	1626	9	9
15-19	791	891	3	3	1014	1095	6	2	1527	1640	9	9
20-24	782	1050	4	1	702	907	9	7	1046	1306	5	9
25-29	990	1143	4	3	827	888	1	5	893	919	12	7
30-34	980	1017	3	1	989	989	5	2	747	736	5	5
35-39	1019	1050	1	1	1015	1071	1	10	717	771	2	8
40-44	959	969	2	2	964	983	6	1	898	943	1	6
45-49	869	919	2	2	991	1017	1	5	941	1060	1	8
50-54	871	888	0	2	913	934	1	1	883	965	5	3
55-59	738	744	2	0	871	902	2	1	904	974	1	5
60-64	550	618	4	0	766	841	0	0	775	934	0	0
65-69	499	516	1	0	597	664	0	1	626	839	3	4
70-74	308	364	0	1	396	572	1	0	546	771	1	3
75-79*	309	442	0	0	290	389	1	0	387	530	0	1
80-84*	0	0	0	0	130	221	0	0	184	376	2	0
85-UP	56	86	0	2	72	132	0	0	149	277	0	0
TOTALS	13331	14212	32	23	15590	16581	50	54	15806	17461	67	96
GRAND TOTAL				27598				32275				33430

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	SUM		1959	1960	1961	SUM
TOTAL	247	270	517		309	318	295	922
CV-RENAL	144	145	289		179	181	182	542
HEART	99	98	197		114	128	137	379
NON CV-R	103	125	228		130	137	113	380
CANCER	29	47	76		57	61	45	163

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	SUM		1959	1960	1961	SUM
TOTAL	247	270	517		309	318	295	922
CV-RENAL	144	145	289		179	181	182	542
HEART	99	98	197		114	128	137	379
NON CV-R	103	125	228		130	137	113	380
CANCER	29	47	76		57	61	45	163

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61			
	1949	1950	SUM		1959	1960	1961	SUM
TOTAL	247	270	517		309	318	295	922
CV-RENAL	144	145	289		179	181	182	542
HEART	99	98	197		114	128	137	379
NON CV-R	103	125	228		130	137	113	380
CANCER	29	47	76		57	61	45	163

CITY CHARACTERISTICS

STATE	WISCONSIN	
	1950 POP/50. MILE	1970 POP/50. MILE
STATE	446	3366
1950 POP/50. MILE	3366	3039
1970 POP/50. MILE	3373	10146
1949 MED. FAM. INCOME	10146	INDEPENDENT
1969 MED. FAM. INCOME	INDEPENDENT	INDEPENDENT
URBAN CLASS	INDEPENDENT	INDEPENDENT
1950 URBAN AREA RANK	19	19
JAN MEAN TEMPERATURE	68	68
JULY MEAN TEMPERATURE	30	30
MEAN ANN. PRECIPITATION	30	30
LAND RESOURCE REGION	L	L
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	187 PPM	187 PPM
NON-CARBONATE HARDNESS	39 PPM	39 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1968	FLUORIDATED IN 1968

CODE

STATE	WISCONSIN	
	1950 POP/50. MILE	1970 POP/50. MILE
STATE	446	3366
1950 POP/50. MILE	3366	3039
1970 POP/50. MILE	3373	10146
1949 MED. FAM. INCOME	10146	INDEPENDENT
1969 MED. FAM. INCOME	INDEPENDENT	INDEPENDENT
URBAN CLASS	INDEPENDENT	INDEPENDENT
1950 URBAN AREA RANK	19	19
JAN MEAN TEMPERATURE	68	68
JULY MEAN TEMPERATURE	30	30
MEAN ANN. PRECIPITATION	30	30
LAND RESOURCE REGION	L	L
WATER SOURCE	SURFACE	SURFACE
TOTAL HARDNESS	187 PPM	187 PPM
NON-CARBONATE HARDNESS	39 PPM	39 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1968	FLUORIDATED IN 1968

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50		1959-61		1969-71	
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	517.0	539.2	0.959	922.0	1016.2	0.907
CV-RENAL	289.0	301.1	0.960	542.0	578.4	0.937
HEART	197.0	215.3	0.915	379.0	412.8	0.918
NON CV-R	228.0	238.1	0.958	380.0	437.8	0.868
CANCER	76.0	86.6	0.878	163.0	201.2	0.809

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	6341	6059	358	370	8185	7879	1267	1329	4880	4776	1595	1623
1-4	23707	22000	1103	1046	29544	28858	5079	4972	19115	18567	6128	6030
5-9	21254	20478	858	925	31524	30354	4854	4881	25808	25022	7882	7976
10-14	18002	17857	766	747	26560	25912	3086	3145	26522	25937	7525	7653
15-19	17852	20372	619	747	20460	23352	1790	2116	25817	26746	5643	6055
20-24	23440	26512	1165	1235	21136	24951	2100	2758	25163	30431	4167	5504
25-29	25924	27027	1411	1343	22993	27195	2583	3131	21426	20896	3406	4361
30-34	23305	24736	1115	1105	22653	22170	2731	2867	15089	14828	3052	3901
35-39	22341	24159	1056	967	21613	22338	2327	2305	13957	14524	2861	3619
40-44	21222	22687	799	693	20257	21860	1712	1577	16471	17179	2861	3128
45-49	20245	21124	790	619	20204	21964	1395	1259	17009	18561	2334	2367
50-54	19790	20171	603	420	19166	20671	1064	972	16526	18782	1701	1770
55-59	18191	17891	435	273	18125	18876	858	789	16146	18624	1380	1384
60-64	15168	14796	287	195	15923	16977	580	481	14179	16932	974	1095
65-69	10403	11540	185	183	12814	14638	428	373	11096	14544	730	848
70-74	6624	7790	92	83	9184	11203	225	246	8585	12550	503	526
75-79*	5354	7418	59	63	5128	7167	138	142	6020	9184	250	254
80-84*	0	0	0	0	2379	3573	60	60	3068	5310	136	184
85-UP	768	1303	11	20	1100	2086	43	29	1744	3358	161	160
TOTALS	299931	314719	11712	11030	328948	346624	32320	33432	288621	316751	53289	58438
GRAND TOTAL				637392				741324				7117099

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP	TOTAL	OBSERVED	EXPECTED*	OBS/EXP
CV-RENAL		7173.0	12320.0			7173.0	12320.0			7173.0	12320.0	
		6072.3	11550.7	13819.0		6072.3	11550.7	13819.0		6072.3	11550.7	13819.0
		1.181	1.067	0.879		1.181	1.067	0.879		1.181	1.067	0.879
HEART		5364.0	8536.0	8506.0		5364.0	8536.0	8506.0		5364.0	8536.0	8506.0
		4401.8	8280.0	9461.5		4401.8	8280.0	9461.5		4401.8	8280.0	9461.5
		1.219	1.031	0.899		1.219	1.031	0.899		1.219	1.031	0.899
NON CV-R		5666.0	10101.0	9852.0		5666.0	10101.0	9852.0		5666.0	10101.0	9852.0
		5219.1	9816.2	10083.3		5219.1	9816.2	10083.3		5219.1	9816.2	10083.3
		1.086	1.029	0.977		1.086	1.029	0.977		1.086	1.029	0.977
CANCER		2275.0	3890.0	4051.0		2275.0	3890.0	4051.0		2275.0	3890.0	4051.0
		1894.5	3433.6	3621.6		1894.5	3433.6	3621.6		1894.5	3433.6	3621.6
		1.201	1.133	1.119		1.201	1.133	1.119		1.201	1.133	1.119

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	1949				1950				49-50				59-61				69-71			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
TOTAL	6356	6483	12839	11030	6356	6483	12839	11030	6356	6483	12839	11030	6356	6483	12839	11030	6356	6483	12839	11030
CV-RENAL	2496	3682	7173	7173	2496	3682	7173	7173	2496	3682	7173	7173	2496	3682	7173	7173	2496	3682	7173	7173
HEART	2616	2942	5364	5364	2616	2942	5364	5364	2616	2942	5364	5364	2616	2942	5364	5364	2616	2942	5364	5364
NON CV-R	2865	2801	5666	5666	2865	2801	5666	5666	2865	2801	5666	5666	2865	2801	5666	5666	2865	2801	5666	5666
CANCER	1083	1190	2275	2275	1083	1190	2275	2275	1083	1190	2275	2275	1083	1190	2275	2275	1083	1190	2275	2275

OBSERVED DEATHS
BY CAUSE AND YEAR

CITY CHARACTERISTICS	CODE		WISCONSIN	
	STATE	1950 RANK BY POPULATION	1950 POP./SQ. MILE	1970 POP./SQ. MILE
			13708	13708
			7598	7598
			3800	3800
			10262	10262
			CENTRAL	CENTRAL
			14	14
			21	21
			71	71
			27	27
			1	1
			126	126
			19	19
			FLUORIDATED	FLUORIDATED

FLUORIDATED IN 1953

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	RP	NM	NP
LT 1	442	406	0	0	454	483	1	3	375	369	3	4
1-4	1580	1542	0	1	1957	1869	1	1	1521	1410	6	13
5-9	1572	1509	1	1	2212	2192	2	4	2161	2065	14	10
10-14	1329	1335	2	2	2060	1912	1	1	2245	2210	8	12
15-19	1329	1350	0	7	1540	1877	0	6	3371	3601	24	21
20-24	1356	1731	1	2	1331	1573	9	6	3619	3784	24	21
25-29	1377	1457	0	1	1219	1249	4	2	1611	1460	20	17
30-34	1311	1469	0	1	1266	1363	0	4	1163	1186	6	8
35-39	1434	1545	0	0	1308	1356	4	1	1106	1161	14	14
40-44	1399	1456	0	0	1195	1420	0	1	1192	1324	3	14
45-49	1300	1338	0	1	1296	1469	1	1	1248	1349	6	3
50-54	1178	1223	1	0	1276	1332	1	1	1140	1377	1	3
55-59	1054	1223	1	2	1118	1217	1	1	1156	1374	0	7
60-64	929	1044	0	1	963	1102	2	1	1021	1265	3	2
65-69	789	937	1	0	830	1080	0	1	828	1075	3	2
70-74	559	683	1	0	640	860	0	0	638	945	3	3
75-79#	637	758	0	0	476	633	0	0	458	793	1	3
80-84#	0	0	0	0	212	359	0	0	249	486	2	0
85-UP	106	158	0	0	132	220	0	0	187	366	2	1
TOTALS	19678	21380	8	18	21485	23566	27	32	25289	27600	166	166
GRAND TOTAL			41084				45110				53221	

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				1969				1971				69-71 SUM
	1949	1950	1959	1960	1961	59-61 SUM	1969	1970	1971	SUM							
TOTAL	473	494	580	521	504	1605	509	556	552	1617							
CV-RENAL	243	281	361	323	297	981	317	318	330	965							
HEART	171	211	246	241	221	708	228	218	231	677							
NON CV-R	230	213	219	198	207	624	192	238	222	652							
CANCER	82	88	90	84	76	250	81	90	90	272							

CITY CHARACTERISTICS

CODE

STATE	WISCONSIN
1950 RANK BY POPULATION	292
1950 POP/SQ. MILE	5478
1970 POP/SQ. MILE	5431
1949 MED. FAM. INCOME	3268
1969 MED. FAM. INCOME	9715
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	17
JULY MEAN TEMPERATURE	72
MEAN ANN. PRECIPITATION	29
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	186 PPM
NON-CARBONATE HARDNESS	32 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1950

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP
LT 1	746	713	25	16	1056	1036	85	111	761	726	168	161
1-4	2832	2721	65	81	4022	3993	379	371	3131	2928	563	566
5-9	2608	2498	78	59	4582	4363	377	353	4363	4169	835	812
10-14	2260	2298	48	46	3819	3715	204	239	4419	4340	782	748
15-19	2088	2370	46	64	2494	2822	167	163	3740	3772	540	556
20-24	2374	2635	95	74	2136	2650	170	211	2738	3498	403	448
25-29	2691	2916	111	88	2490	2518	215	233	2724	2630	359	424
30-34	2598	2723	84	65	2798	2814	203	201	2197	2221	299	358
35-39	2472	2657	67	64	2817	3002	171	147	2105	2032	289	345
40-44	2328	2479	46	38	2600	2746	134	118	2280	2458	252	252
45-49	2176	2300	44	28	2465	2587	102	95	2243	2652	212	169
50-54	2251	2273	30	20	2140	2294	65	52	2214	2406	142	152
55-59	2110	2092	18	22	1962	2050	42	37	2033	2264	115	144
60-64	1772	1683	20	20	1760	2017	37	29	1714	1967	71	67
65-69	1265	1308	12	10	1533	1821	23	23	1314	1730	54	50
70-74	770	867	8	5	1176	1370	15	13	1117	1590	34	51
75-79*	650	888	6	5	663	903	9	8	785	1223	12	29
80-84*	0	0	0	0	293	427	5	4	479	721	8	12
85-UP	95	175	1	2	144	254	0	1	235	448	5	8
TOTALS	34086	35596	804	707	40950	43382	2403	2409	40692	43975	5143	5352
GRAND TOTAL				71193				89144				95162

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED				OBSERVED				OBSERVED			
TOTAL	1394.0	2539.0	2744.0		1304.1	2520.6	2994.3		1069	1.007	0.916	
CV-RENAL	763.0	1461.0	1521.0		710.9	1373.3	1719.1		1.073	1.064	0.885	
HEART	516.0	1036.0	1092.0		514.6	984.2	1203.8		1.003	1.053	0.907	
NON CV-R	631.0	1078.0	1223.0		593.3	1147.3	1275.2		1.064	0.940	0.959	
CANCER	241.0	442.0	519.0		217.6	404.1	455.1		1.107	1.094	1.140	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CAUSE	OBSERVED DEATHS BY CAUSE AND YEAR				CITY CHARACTERISTICS				CODE
	1949	1950	49-50 SUM	59-61 SUM	1969	1970	1971	69-71 SUM	
TOTAL	686	708	1394	2539	922	927	895	2744	STATE 1950 RANK BY POPULATION 16738
CV-RENAL	376	387	763	1461	527	490	504	1521	1970 POP/SQ. MILE 7264
HEART	255	261	516	343	351	365	370	1092	1949 MED. FAM. INCOME 4051
NON CV-R	317	321	631	1078	393	437	391	1223	1969 MED. FAM. INCOME 10526
CANCER	117	124	241	442	163	180	176	519	URBAN CLASS CENTRAL
									1950 URBAN AREA RANK 145
									JAN MEAN TEMPERATURE 22
									JULY MEAN TEMPERATURE 77
									MEAN ANN. PRECIPITATION 30
									LAND RESOURCE REGION H
									WATER SOURCE SURFACE
									TOTAL HARDNESS 130 PPM
									NON-CARBONATE HARDNESS 24 PPM
									FLUORIDATION STATUS FLUORIDATED IN 1950

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT 1	412	401	0	0	481	489	0	0	420	397	4	1
1-4	1687	1623	0	0	1988	1957	3	2	1659	1493	16	12
5-9	1634	1553	4	0	2321	2168	2	5	2359	2234	7	14
10-14	1436	1535	4	0	2074	1989	0	3	2375	2352	10	6
15-19	1341	1356	1	0	1369	1416	1	0	2082	2104	5	10
20-24	1254	1523	3	1	962	1262	0	1	1535	1815	8	12
25-29	1505	1627	2	0	1211	1196	0	4	1414	1395	6	9
30-34	1498	1631	1	0	1351	1393	4	2	1109	1211	10	7
35-39	1532	1679	0	0	1454	1530	0	0	1172	1153	2	4
40-44	1504	1526	0	0	1430	1506	0	3	1301	1332	2	2
45-49	1357	1489	0	0	1416	1560	0	2	1344	1449	4	2
50-54	1355	1304	0	0	1342	1409	0	0	1298	1508	4	2
55-59	1220	1287	1	0	1179	1367	0	0	1287	1489	2	2
60-64	1016	1081	0	0	1087	1226	0	0	1411	1350	1	4
65-69	737	763	0	0	708	851	0	0	941	1250	0	4
70-74	551	614	0	0	486	583	0	0	729	1018	0	4
75-79#	519	623	0	0	406	553	0	0	575	791	1	4
80-84#	0	0	0	0	235	325	0	0	303	440	2	4
85-89	91	120	1	0	113	198	0	0	177	296	0	1
TOTALS	20649	21701	13	2	22151	23564	10	22	23196	25097	84	107
GRAND TOTAL			42365				45747				48484	

AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	856.0	1524.0	1719.0		856.0	1524.0	1719.0	
	843.8	1545.7	1816.9		843.8	1545.7	1816.9	
	1.014	0.986	0.946		1.014	0.986	0.946	
CV-RENAL	489.0	884.0	964.0		489.0	884.0	964.0	
	476.3	893.4	1090.6		476.3	893.4	1090.6	
	1.027	0.989	0.884		1.027	0.989	0.884	
HEART	330.0	588.0	701.0		330.0	588.0	701.0	
	342.0	637.2	766.4		342.0	637.2	766.4	
	0.965	0.923	0.915		0.965	0.923	0.915	
NON CV-R	367.0	640.0	755.0		367.0	640.0	755.0	
	367.6	652.3	726.2		367.6	652.3	726.2	
	0.998	0.981	1.040		0.998	0.981	1.040	
CANCER	139.0	272.0	313.0		139.0	272.0	313.0	
	138.7	250.3	283.3		138.7	250.3	283.3	
	1.002	1.087	1.105		1.002	1.087	1.105	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
TOTAL	441	415	856		533	502	489	1524	589	562	1719	
CV-RENAL	261	228	489		305	292	287	884	345	309	964	
HEART	164	166	330		203	196	189	568	269	215	701	
NON CV-R	180	187	367		228	210	202	640	284	253	755	
CANCER	69	70	139		90	85	97	272	89	116	313	

CITY CHARACTERISTICS

STATE	1950 RANK BY POPULATION		WISCONSIN
	1950 POP/50. MILE	1970 POP/50. MILE	
	6725	3050	6725
	1970 POP/50. MILE	3692	3692
	1949 MED. FAM. INCOME	10068	10068
	1969 MED. FAM. INCOME	10068	10068
	URBAN URBAN AREA RANK	1	1
	1950 URBAN AREA RANK	20	20
	JAN MEAN TEMPERATURE	63	63
	JULY MEAN TEMPERATURE	30	30
	MEAN ANNUAL PRECIPITATION	30	30
	LAND RESOURCE REGION	1	1
	WATER SOURCE	1	1
	TOTAL HARDNESS	132 PPM	132 PPM
	NON-CARBONATE HARDNESS	22 PPM	22 PPM
	FLUORIDATION STATUS	FLUORIDATED IN 1946	FLUORIDATED IN 1946

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

AGE GROUP	1950				1960				1970				CAUSE	1949-50	1959-61	1969-71
	WM	WP	NM	NP	WM	WP	NM	NP	WM	WP	NM	NP				
LT 1	358	342	3	3	372	360	0	0	267	235	2	3	TOTAL			
1-4	1464	1324	7	1-4	1451	1387	0	3	915	871	11	20	OBSERVED	872.0	1343.0	1247.0
5-9	1520	1423	11		1615	1587	5	6	1411	1340	19	19	EXPECTED*	721.8	1125.3	
10-14	1385	1337	12	12	1534	1467	8	5	1485	1485	22	12	OBS/EXP	1.208	1.193	1.061
15-19	1148	1286	7		1273	1323	3	6	1702	1630	26	26	CV-RENAI			
20-24	1220	1201	6	4	1031	1007	6	8	1550	1476	39	31	OBSERVED	500.0	794.0	768.0
25-29	1214	1219	10	7	794	779	9	6	880	804	15	13	EXPECTED*	408.7	646.0	702.6
30-34	1115	1233	5	6	885	877	4	3	726	744	11	7	OBS/EXP	1.223	1.229	1.093
35-39	1175	1274	2	6	944	997	5	2	639	670	6	11				
40-44	1147	1222	5	7	1026	1050	4	6	795	809	10	6	HEART			
45-49	1110	1101	2	4	1012	1094	3	7	876	905	6	10	OBSERVED	336.0	632.0	625.0
50-54	1060	1072	8	3	954	1027	4	3	913	1010	9	8	EXPECTED*	293.6	462.5	494.3
55-59	1029	983	2	3	919	971	3	1	918	1009	5	6	OBS/EXP	1.144	1.366	1.264
60-64	958	806	2	6	817	856	4	2	887	759	6	4				
65-69	724	662	2	3	711	787	2	0	605	747	1	1	NON CV-R			
70-74	454	427	2	2	588	629	1	0	450	641	7	1	OBSERVED	372.0	549.0	479.0
75-79*	483	493	2	2	371	365	1	1	331	492	2	2	EXPECTED*	313.1	479.3	472.5
80-84*	0	0	0	0	162	199	1	1	216	302	1	0	OBS/EXP	1.188	1.145	1.014
85-90*	89	102	0	0	101	113	1	1	115	179	1	1				
TOTALS	17653	17507	88	77	16560	16875	65	63	15627	16228	199	183				
GRAND TOTAL				35325				33563				32237	CANCER			
* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED																
													OBSERVED	123.0	208.0	228.0
													EXPECTED*	117.3	182.7	183.4
													OBS/EXP	1.049	1.139	1.243

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

		OBSERVED DEATHS BY CAUSE AND YEAR					CITY CHARACTERISTICS				CODE	
		49-50					STATE				WISCONSIN	
		1950	1959	1960	1961	59-61 SUM	1969	1970	1971	69-71 SUM		
CAUSE	1949	465	428	460	455	1303	431	407	409	1247	1950 RANK BY POPULATION	
	TOTAL	259	251	266	277	794	256	256	242	768	1950 POP./SQ. MILE	
	CV-RENAL	162	210	209	213	632	223	211	192	626	1949 MED. FAM. INCOME	
	HEART	206	177	194	178	549	161	151	167	479	1969 MED. FAM. INCOME	
	NON CV-R	61	77	63	68	208	73	75	80	228	URBAN CLASS.	
CANCER											1950 URBAN AREA RANK	
											JAN MEAN TEMPERATURE	
											JULY MEAN TEMPERATURE	
											MEAN ANN. PRECIPITATION	
											LAND RESOURCE REGION	
											WATER SOURCE	
											TOTAL HARDNESS	
											NON-CARBONATE HARDNESS	
											50 PPM	
											FLUORIDATION STATUS	
											NO ARTIFICIAL	

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	309	297	0	0	381	317	0	0	229	234	1	1
1-4	1257	1273	1	0	1378	1305	1	3	1968	1871	5	3
5-9	1204	1216	0	0	1588	1605	0	2	1454	1323	4	4
10-14	1204	1216	3	0	1378	1423	0	2	1626	1579	5	3
15-19	888	1157	0	1	1026	1274	0	2	1665	1724	3	4
20-24	960	1337	3	0	720	1036	1	1	1017	1313	6	4
25-29	1081	1324	0	0	824	896	2	3	904	972	1	2
30-34	1066	1197	0	0	939	1000	1	2	766	741	6	5
35-39	1064	1210	0	0	999	1066	1	4	699	811	3	5
40-44	1041	1087	1	0	961	1076	0	4	914	1020	2	6
45-49	954	1060	0	0	941	1074	0	0	949	1041	1	2
50-54	859	938	0	0	922	1018	0	0	920	1082	0	1
55-59	729	828	0	0	773	893	0	0	820	981	0	2
60-64	676	676	0	0	685	861	0	1	737	925	1	0
65-69	510	577	0	0	587	721	0	0	605	829	0	0
70-74	367	370	0	0	494	558	0	0	442	756	2	1
75-79*	363	384	0	0	318	400	1	0	338	572	0	0
80-84*	0	0	0	0	147	184	0	0	210	342	0	0
85-UP	60	101	0	0	84	111	0	0	123	228	0	0
TOTALS	14455	15950	8	1	15099	16815	7	22	15376	17350	41	39
GRAND TOTAL				30414				31943				32806

* AS RECORDED IN 1950 ONLY. 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

OBSERVED DEATHS
BY CAUSE AND YEAR

CAUSE	49-50				59-61				69-71			
	1949	1950	SUB	SUM	1959	1960	1961	SUM	1969	1970	1971	SUM
TOTAL	276	358	634	212	330	303	327	960	395	381	398	1174
CV-RENAL	143	212	355	212	189	181	196	566	224	224	226	674
HEART	94	137	231	133	133	113	129	375	150	163	176	489
NON CV-R	133	146	279	141	141	122	131	394	171	157	172	500
CANCER	38	51	89	51	51	47	53	151	75	73	84	232

CITY CHARACTERISTICS

STATE	WISCONSIN
1950 BANK BY POPULATION	392
1950 POP/SQ. MILE	4473
1970 POP/SQ. MILE	2757
1949 MED. FAM. INCOME	3326
1969 MED. FAM. INCOME	9449
URBAN CLASS	INDEPENDENT
1950 URBAN AREA RANK	-
JAN MEAN TEMPERATURE	11
JULY MEAN TEMPERATURE	67
MEAN ANN. PRECIPITATION	31
LAND RESOURCE REGION	K
WATER SOURCE	GROUND
TOTAL HARDNESS	129 PPM
NON-CARBONATE HARDNESS	24 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1952

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	634.0	573.2	1.106		960.0	1016.2	0.945		1174.0	1240.7	0.946	
CV-RENAL	355.0	321.0	1.106		566.0	582.0	0.973		674.0	753.3	0.895	
HEART	231.0	229.9	1.005		375.0	415.6	0.902		489.0	526.8	0.928	
NON CV-R	279.0	252.1	1.107		394.0	434.3	0.907		500.0	487.4	1.026	
CANCER	89.0	93.2	0.955		151.0	165.6	0.912		232.0	192.2	1.207	

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NP	WM	WF	NM	NP	WM	WF	NM	NP
LT-1	511	450	0	2	900	808	4	2	601	551	5	1
1-4	1801	1636	3	2	3084	3373	3	8	2225	2252	7	15
5-9	1787	1695	3	2	3431	3373	3	5	3114	3178	18	13
10-14	1458	1340	9	4	3144	2911	2	4	3383	3376	10	14
15-19	1367	1432	3	2	2282	2352	2	7	3040	3065	8	10
20-24	1499	1622	2	4	1888	2169	4	5	2637	3157	15	12
25-29	1955	1954	4	5	2081	1984	4	5	2425	2334	13	15
30-34	1748	1789	4	1	2236	2281	2	5	1800	1803	11	8
35-39	1800	1782	1	0	2378	2528	1	7	1803	1741	10	12
40-44	1458	1534	3	0	2367	2500	0	2	2019	2148	5	6
45-49	1375	1419	0	0	2372	2335	2	1	2226	2473	6	9
50-54	1314	1260	4	2	1960	2004	4	2	2194	2401	12	8
55-59	1231	1150	1	2	1679	1668	1	2	2073	2244	3	8
60-64	971	945	1	0	1387	1371	1	2	1676	1856	2	5
65-69	654	619	2	1	1141	1209	0	1	1086	1473	1	1
70-74	367	386	0	0	773	867	0	1	852	1218	2	3
75-79*	259	333	0	0	412	496	0	0	585	928	0	2
80-84*	0	0	0	0	169	272	0	0	307	593	1	2
85-UP	25	63	0	0	81	146	0	1	194	418	0	1
TOTALS	21480	21409	42	28	33765	34300	32	60	34240	37209	129	145
GRAND TOTAL			42	42559			32	66157			129	71723

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50			1959-61			1969-71		
	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP	OBSERVED	EXPECTED*	OBS/EXP
TOTAL	701.0	1692.0	2088.0	701.0	1692.0	2088.0	701.0	1692.0	2088.0
	639.3	1713.3	2337.4	639.3	1713.3	2337.4	639.3	1713.3	2337.4
	1.096	0.988	0.853	1.096	0.988	0.853	1.096	0.988	0.853
CV-RENAL									
OBSERVED	371.0	945.0	1174.0	371.0	945.0	1174.0	371.0	945.0	1174.0
EXPECTED*	327.0	908.7	1371.3	327.0	908.7	1371.3	327.0	908.7	1371.3
OBS/EXP	1.135	1.040	0.856	1.135	1.040	0.856	1.135	1.040	0.856
HEART									
OBSERVED	288.0	651.0	833.0	288.0	651.0	833.0	288.0	651.0	833.0
EXPECTED*	241.3	661.8	968.8	241.3	661.8	968.8	241.3	661.8	968.8
OBS/EXP	1.193	0.984	0.860	1.193	0.984	0.860	1.193	0.984	0.860
NON CV-R									
OBSERVED	330.0	747.0	914.0	330.0	747.0	914.0	330.0	747.0	914.0
EXPECTED*	312.4	804.6	966.1	312.4	804.6	966.1	312.4	804.6	966.1
OBS/EXP	1.056	0.928	0.946	1.056	0.928	0.946	1.056	0.928	0.946
CANCER									
OBSERVED	132.0	307.0	415.0	132.0	307.0	415.0	132.0	307.0	415.0
EXPECTED*	110.4	285.9	374.7	110.4	285.9	374.7	110.4	285.9	374.7
OBS/EXP	1.196	1.074	1.120	1.196	1.074	1.120	1.196	1.074	1.120

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS

STATE	WISCONSIN
1950 RANK BY POPULATION	278
1950 POP/50. MILE	9763
1970 POP/50. MILE	6237
1949 MED. FAM. INCOME	4044
1969 MED. FAM. INCOME	11050
URBAN CLASS	FRINGE
1950 URBAN AREA RANK	14
JAN MEAN TEMPERATURE	21
JULY MEAN TEMPERATURE	71
MEAN ANN. PRECIPITATION	27
LAND RESOURCE REGION	L
WATER SOURCE	SURFACE
TOTAL HARDNESS	126 PPM
NON-CARBONATE HARDNESS	19 PPM
FLUORIDATION STATUS	FLUORIDATED IN 1953

POPULATION
BY AGE, RACE, SEX AND CENSUS YEAR

AGE GROUP	1950				1960				1970			
	WM	WF	NM	NF	WM	WF	NM	NF	WM	WF	NM	NF
LT 1	375	370	14	11	562	599	13	32	363	378	20	18
1-4	1487	1541	55	39	2111	2113	83	75	1347	1268	71	53
5-9	1433	1365	18	25	2288	2155	75	76	1998	2033	90	106
10-14	1015	1017	21	23	1944	1859	35	42	2151	2130	98	99
15-19	1034	1034	12	32	1339	1479	23	31	1727	1864	65	71
20-24	1129	1385	28	55	1304	1527	43	54	1334	1534	65	73
25-29	1301	1548	52	58	1645	1489	35	54	1524	1398	36	43
30-34	1464	1439	55	47	1602	1450	34	35	1624	1398	36	43
35-39	1240	1439	53	35	1484	1366	28	43	1157	1269	35	47
40-44	1060	1119	29	24	1362	1332	22	43	1124	1134	24	39
45-49	877	893	21	3	1123	1262	22	18	1073	1287	29	31
50-54	760	653	12	2	1123	1262	22	18	1073	1287	29	31
55-59	560	637	13	8	904	1097	16	13	939	1037	22	16
60-64	366	487	13	11	898	722	15	13	790	904	19	13
65-69	366	381	17	10	570	618	9	10	581	739	16	19
70-74	215	224	6	6	349	408	8	7	473	591	11	7
75-79*	196	210	5	7	220	285	9	6	297	443	4	10
80-84*	0	0	0	0	96	129	4	2	170	251	6	4
85-UP*	24	46	2	2	63	89	1	2	95	159	7	3
TOTALS	15284	15815	409	427	21282	21122	530	571	18979	20527	668	740
GRAND TOTAL				31935				43505				40914

* AS RECORDED IN 1950 ONLY, 75-79 REPRESENTS THE 10 YEAR GROUP 75-84 AND 80-84 MAY BE IGNORED

DEATHS AND DEATH RATIOS
BY CAUSE AND CENSUS PERIOD

CAUSE	1949-50				1959-61				1969-71			
	OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP		OBSERVED	EXPECTED*	OBS/EXP	
TOTAL	526.0	436.1	1.206		952.0	994.4	0.957		1140.0	1184.5	0.962	
CV-RENAL												
OBSERVED	235.0				437.0				560.0			
EXPECTED*	217.4				510.7				672.9			
OBS/EXP	1.081				0.856				0.832			
HEART												
OBSERVED	154.0				308.0				406.0			
EXPECTED*	158.6				370.0				476.3			
OBS/EXP	0.971				0.833				0.852			
NON CV-R												
OBSERVED	291.0				515.0				580.0			
EXPECTED*	218.7				483.7				511.6			
OBS/EXP	1.331				1.065				1.134			
CANCER												
OBSERVED	72.0				129.0				194.0			
EXPECTED*	71.7				159.6				187.3			
OBS/EXP	1.004				0.808				1.036			

* SEE INTRODUCTION FOR METHOD OF CALCULATING EXPECTED VALUES

CITY CHARACTERISTICS	CODE	
	STATE	WYOMING
1950 RANK BY POPULATION	379	
1950 POP./SQ. MILE	4316	
1970 POP./SQ. MILE	3589	
1949 MED. FAM. INCOME	3855	
1969 MED. FAM. INCOME	9599	
URBAN CLASS	INDEPENDENT	
1950 URBAN AREA RANK	-	
JAN MEAN TEMPERATURE	25	
JULY MEAN TEMPERATURE	68	
MEAN ANN. PRECIPITATION	16	
LAND RESOURCE REGION	G	
WATER SOURCE	GROUND AND SURFACE	
TOTAL HARDNESS	51 PPM	
NON-CARBONATE HARDNESS	5 PPM	
FLOODING STATUS	NO ARTIFICIAL OPTIMUM NATURAL	

CAUSE	49-50				59-61				69-71			
	1949	1950	SUM		1959	1960	1961	SUM	1971	1970	SUM	
TOTAL	257	269	526		299	332	321	952	383	369	1140	
CV-RENAL	110	125	235		140	156	141	437	165	165	560	
HEART	76	78	154		97	110	101	308	126	126	406	
NON CV-R	147	144	291		159	176	180	515	204	204	580	
CANCER	40	32	72		40	49	40	129	64	64	194	

Section II

Table of Contents

Cities Ranked by:

Total Hardness of Drinking Water	1
Non-carbonate Hardness of Drinking Water	5
Year of Fluoridation	9
Average Annual Precipitation	13
Average January Temperature	17
Average July Temperature	21
1950 Population Density	25
1970 Population Density	29
1949 Median Family Income	33

1969 Median Family Income	37
1950 Mortality Ratio—all Causes	41
1960 Mortality Ratio—all Causes	45
1970 Mortality Ratio—all Causes	49
1950 Mortality Ratio—Cardiovascular-renal Diseases	53
1960 Mortality Ratio—Cardiovascular-renal Diseases	57
1970 Mortality Ratio—Cardiovascular-renal Diseases	61

1950 Mortality Ratio—Diseases of the Heart	65
1960 Mortality Ratio—Diseases of the Heart	69
1970 Mortality Ratio—Diseases of the Heart	73
1950 Mortality Ratio—Non-cardiovascular-renal Diseases	77

1960 Mortality Ratio—Non-cardiovascular-renal Diseases	81
1970 Mortality Ratio—Non-cardiovascular-renal Diseases	85
1950 Mortality Ratio—Cancer	89
1960 Mortality Ratio—Cancer	93
1970 Mortality Ratio—Cancer	97

RANK	CITY	STATE	HARDNESS		RANK	CITY	STATE	TOTAL	
			PAGE	PAGE				HARDNESS	PAGE
1	ROSWELL	NM	426	286	60	OMAHA	NEB	236	252
2	SALT LAKE CITY	UT	512	473	61	DANVILLE	ILL	232	101
3	WINTHROP	MS	482	479	62	MANFIELD	OHIO	229	345
4	ST. LOUIS	MO	474	144	63	ALTONA	PENN	228	372
5	ST. LOUIS	MO	474	144	64	HUNTINGTON PARK	CAL	228	24
6	ST. LOUIS	MO	474	144	65	SAN ANTONIO	TEX	223	429
7	ST. LOUIS	MO	474	144	66	SAN ANTONIO	CAL	220	45
8	ST. LOUIS	MO	474	144	67	SAN ANTONIO	PENN	219	384
9	ST. LOUIS	MO	474	144	68	PARKERSBURG	WV	216	461
10	ST. LOUIS	MO	474	144	69	ROCK ISLAND	ILL	215	116
11	ST. LOUIS	MO	474	144	70	SOUTH GATE	CAL	213	47
12	ST. LOUIS	MO	474	144	71	ALEXANDRIA	LA	213	163
13	ST. LOUIS	MO	474	144	72	COMPTON	CAL	209	21
14	ST. LOUIS	MO	474	144	73	TERRE HAUTE	IND	208	137
15	ST. LOUIS	MO	474	144	74	TERRE HAUTE	IND	207	20
16	ST. LOUIS	MO	474	144	75	BURBANK	CAL	207	39
17	ST. LOUIS	MO	474	144	76	GRANDE	NEB	206	265
18	ST. LOUIS	MO	474	144	77	GRANDE	NEB	206	251
19	ST. LOUIS	MO	474	144	78	ELKHART	IND	203	122
20	ST. LOUIS	MO	474	144	79	ELKHART	IND	203	122
21	ST. LOUIS	MO	474	144	80	SAN ANGELO	MISS	202	238
22	ST. LOUIS	MO	474	144	81	ATLANTA	TEX	200	428
23	ST. LOUIS	MO	474	144	82	ATLANTA	TEX	194	414
24	ST. LOUIS	MO	474	144	83	SAN JOSE	TEX	194	414
25	ST. LOUIS	MO	474	144	84	RAPID CITY	SD	194	41
26	ST. LOUIS	MO	474	144	85	PUEBLO	CO	193	406
27	ST. LOUIS	MO	474	144	86	PUEBLO	CO	191	32
28	ST. LOUIS	MO	474	144	87	MAINTONOC	CAL	189	471
29	ST. LOUIS	MO	474	144	88	MAINTONOC	WIS	186	471
30	ST. LOUIS	MO	474	144	89	MAINTONOC	WIS	186	471
31	ST. LOUIS	MO	474	144	90	OSHKOSH	ILL	182	95
32	ST. LOUIS	MO	474	144	91	EAST ST. LOUIS	ILL	182	103
33	ST. LOUIS	MO	474	144	92	GRANITE CITY	ILL	182	107
34	ST. LOUIS	MO	474	144	93	NORRISTOWN	PENN	182	385
35	ST. LOUIS	MO	474	144	94	SPRINGFIELD	MO	178	246
36	ST. LOUIS	MO	474	144	95	POMONA	PENN	177	380
37	ST. LOUIS	MO	474	144	96	REDCONC BEACH	CAL	175	32
38	ST. LOUIS	MO	474	144	97	ENID	OKLA	174	33
39	ST. LOUIS	MO	474	144	98	TOLEDO	CAL	172	361
40	ST. LOUIS	MO	474	144	99	ALHAMBRA	OHIO	170	357
41	ST. LOUIS	MO	474	144	100	ROYAL OAK	OHIO	170	16
42	ST. LOUIS	MO	474	144	101	SCHENECTADY	NY	162	223
43	ST. LOUIS	MO	474	144	102	PANAMA CITY	FLA	160	308
44	ST. LOUIS	MO	474	144	103	OGDEN	UTAH	158	76
45	ST. LOUIS	MO	474	144	104	ALLEN TOWN	FLA	158	434
46	ST. LOUIS	MO	474	144	105	SPCKANE	PENN	157	371
47	ST. LOUIS	MO	474	144	106	WACO	WASH	156	452
48	ST. LOUIS	MO	474	144	107	FARGO	TEX	156	432
49	ST. LOUIS	MO	474	144	108	BURLINGTON	ND	155	326
50	ST. LOUIS	MO	474	144	109	TALLAHASSEE	IOWA	154	138
51	ST. LOUIS	MO	474	144	110	PRCVO	FLA	152	79
52	ST. LOUIS	MO	474	144	111	LINDEN	UTAH	152	435
53	ST. LOUIS	MO	474	144	112	LINDEN	NJ	151	271
54	ST. LOUIS	MO	474	144	113	ELIZABETH	NJ	151	264
55	ST. LOUIS	MO	474	144	114	GREAT FALLS	MO	151	250
56	ST. LOUIS	MO	474	144	115	BILLINGS	WY	148	248
57	ST. LOUIS	MO	474	144	116	EL PASO	TEX	146	421
58	ST. LOUIS	MO	474	144	117	LANTON	OKLA	144	362
59	ST. LOUIS	MO	474	144	118	FORT WORTH	TEX	144	422
60	ST. LOUIS	MO	474	144	119	SANTA MONICA	CAL	141	44
61	ST. LOUIS	MO	474	144	120	SANTA MONICA	CAL	140	46

(TOTAL HARDNESS CONTINUED)

RANK	CITY	STATE	TOTAL HARDNESS	PAGE
240	INDEPENDENCE	MO	86	240
241	YOUNGSTOWN	OHIO	86	359
242	WICHITA	KAN	86	155
243	FLINT	MICH	86	212
244	LANSING	MICH	86	218
245	ROSEL	ID	85	91
246	AUSTIN	TEX	85	416
247	WHITE PLAINS	NJ	84	314
248	ORANGE	NJ	84	276
249	SHARON	PENN	84	390
250	ALLIANCE	OHIO	83	329
251	ROCHESTER	NY	82	306
252	DAYTONA BEACH	FLA	82	67
253	TAMPA	FLA	81	80
254	APPLETON	WIS	81	463
255	CAMDEN	NJ	80	261
256	LIMA	OHIO	80	343
257	ANN ARBOR	MICH	80	206
258	OTTAWA	IOWA	80	148
259	MIAMI BEACH	FLA	79	74
260	MIAMI	FLA	79	73
261	DES MOINES	IOWA	78	143
262	WATERTOWN	NY	78	313
263	NEPORT	RI	76	397
264	MORGANTOWN	WV	76	460
265	RICHMOND	VA	76	156
266	FORT WAYNE	IND	76	114
267	QUINCY	ILL	75	109
268	KANKAKEE	ILL	75	109
269	PHILADELPHIA	PENN	75	386
270	PHILADELPHIA	PA	74	443
271	NEW ORLEANS	LA	74	168
272	HOUSTON	TEX	73	424
273	HUNTINGTON	WV	72	459
274	CADSDEN	ALA	72	4
275	BAY CITY	MICH	71	208
276	TYLER	TEX	71	431
277	POUGHKEEPSIE	NY	71	305
278	BINGHAMTON	NY	70	291
279	SAGINAW	MICH	70	224
280	SPRINGFIELD	ILL	69	117
281	WEST NEW YORK	NJ	69	283
282	HACKENSACK	NJ	69	266
283	UNION CITY	NJ	69	282
284	ROANOKE	VA	69	447
285	NEWPORT NEWS	VA	68	442
286	MINNEAPOLIS	MINN	68	227
287	SHREVEPORT	LA	68	169
288	ITHACA	NY	67	295
289	WICHITA FALLS	TEX	67	433
290	BEAUMONT	TEX	66	417
291	DALLAS	TEX	66	420
292	PERTH AMBOY	NJ	65	249
293	VALLEJO	CAL	64	344
294	LONG BEACH	CAL	62	346
295	NEWARK	OHIO	61	315
296	YONKERS	PENN	61	391
297	WASHINGTON	FLA	60	81
298	WEST PALM BEACH	FLA	60	81
299	KEY WEST	FLA	60	71

RANK	CITY	STATE	TOTAL HARDNESS	PAGE
300	MCLINE	ILL	59	111
301	BIRMINGHAM	ALA	59	3
302	BESSEMER	ALA	59	2
303	CHATTANOOGA	TENN	59	408
304	MASSILLON	OHIO	58	347
305	ST. PAUL	MINN	58	230
306	ST. FRANCISCO	CAL	58	40
307	GAINSVILLE	FLA	57	69
308	JOHNSON CITY	TENN	57	410
309	BURLINGTON	VT	56	437
310	FORT LAUDERDALE	FLA	56	68
311	CAMBRIDGE	MASS	56	179
312	BUTTE	MONT	56	249
313	REDWOOD CITY	CAL	56	34
314	VANCOUVER	WASH	55	454
315	ALBANY	NY	54	288
316	EAU CLAIRE	WIS	54	465
317	CHESTER	PENN	54	374
318	BEVERLY	MASS	54	176
319	SALEM	MASS	54	200
320	SAN MATEO	CAL	54	43
321	TRENTON	NJ	53	281
322	TEMPLE	TEX	51	430
323	SUPERIOR	WIS	50	419
324	ROCHELLE	MS	50	302
325	WINTHROP	NC	50	100
326	BALTIMORE	MD	50	173
327	YORK	PENN	49	395
328	JACKSON	TENN	49	409
329	WILMINGTON	DEL	48	65
330	JACKSON	MISS	47	235
331	PETERSBURG	VA	46	444
332	ROCKY MOUNT	NC	46	323
333	VALLEY STREAM	NY	45	312
334	PORT ARTHUR	TEX	45	427
335	NUTLEY	NJ	45	275
336	NEWTON	MASS	45	195
337	PASSAIC	NJ	45	277
338	PATTERSON	NJ	45	278
339	CLIFTON	NJ	45	262
340	LAWRENCE	MASS	44	188
341	HAGERSTOWN	MD	44	175
342	NEW BRUNSWICK	NJ	44	274
343	DULUTH	MINN	44	226
344	NEW HAVEN	CONN	43	59
345	NEW YORK CITY	NY	43	303
346	ALEXANDRIA	VA	43	438
347	HIGH POINT	NC	42	321
348	LOWELL	MASS	42	189
349	MONTGOMERY	ALA	42	6
350	BREMERTON	WASH	41	449
351	DURHAM	NC	41	318
352	PORTSMOUTH	VA	41	445
353	ROY	NC	40	310
354	GREENSBORO	NC	40	253
355	LYNN	MASS	40	190
356	MERTON	GA	39	83
357	ATHEWS	GA	39	89
358	ROSE	GA	39	89

TOTAL HARDNESS				TOTAL HARDNESS			
(4)				(4)			
RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE
360	PITTSFIELD	MASS	39	420	SACRAMENTO	CAL	37
361	BATON ROUGE	LA	38	421	RIOXI	MISS	20
362	MEMPHIS	TENN	38	422	TORRINGTON	CONN	20
363	DANVILLE	VA	36	423	KINGSTON	NY	20
364	BANGOR	ME	36	424	PENSACOLA	FLA	20
365	JERSEY CITY	NJ	36	425	AUGUSTA	GA	20
366	CUMBERLAND	MD	36	426	ATLANTA	GA	20
367	HOPKIN	GA	36	427	MOBILE	ALA	20
368	SAVANNAH	GA	36	428	COLORADO SPRINGS	COLO	50
369	MONROE	LA	36	429	MERIDIAN	MISS	18
370	ROME	NY	35	430	NORTH LITTLE ROCK	ARK	13
371	WINSTON-SALEM	NC	34	431	LITTLE ROCK	ARK	18
372	WILMINGTON	NC	34	432	SPARTANBURG	SC	18
373	NORWALK	CONN	34	433	SEATTLE	WASH	18
374	HOT SPRINGS	ARK	33	434	SALEM	ORE	17
375	MACON	GA	32	435	EUGENE	ORE	17
376	CHARLESTON	WV	32	436	WILKES-BARRE	PENN	17
377	FAYETTEVILLE	NC	31	437	JOHNSTOWN	PENN	17
378	STAMFORD	CONN	31	438	RELLINGHAM	WASH	16
379	SANTA FE	NM	30	439	WILLIAMSPORT	PENN	16
380	RALEIGH	NC	30	440	UTICA	NY	16
381	COLUMBIA	SC	29	441	FALL RIVER	MASS	15
382	NEW BRITAIN	CONN	29	442	NEW BEDFORD	MASS	15
383	MIDLETTOWN	CONN	29	443	LYNCHBURG	VA	15
384	BRIDGEPORT	CONN	29	444	PORTLAND	ME	14
385	HATTIESBURG	MISS	29	445	LEWISTON	ME	14
386	LA GRANGE	GA	28	446	TAUNTON	MASS	13
387	GLUCESTER	MASS	28	447	HARRISBURG	PENN	13
388	FORT SMITH	ARK	28	448	EVERETT	WASH	12
389	PINE BLUFF	ARK	28	449	WOONSOCKET	RI	12
390	PANTUCKET	RI	27	450	SPRINGFIELD	MASS	12
391	SCRANTON	PENN	26	451	MELROSE	MASS	12
392	NEWARK	NJ	26	452	CONCORD	NH	12
393	ALAMEDA	CAL	26	453	CHELSEA	MASS	12
394	BERKELEY	CAL	26	454	EVERETT	MASS	12
395	MOLYCKE	MASS	26	455	WICHOPEE	MASS	12
396	MONTCLAIR	NJ	26	456	WECFORD	MASS	12
397	SALINAS	CAL	26	457	WALTON	MASS	12
398	RICHMOND	CAL	26	458	WALTON	MASS	12
399	OAKLAND	CAL	26	459	SCHEFFVILLE	MASS	12
400	NASHUA	NH	25	460	BOSTON	MASS	12
401	COLUMBUS	GA	25	461	HARTFORD	CONN	12
402	KEARNY	NJ	25	462	QUINCY	MASS	12
403	RAYCNNE	NJ	25	463	MANCHESTER	NH	12
404	BELLEVILLE	NJ	25	464	MALDEN	MASS	12
405	BLOOMFIELD	NJ	25	465	AMSTERDAM	NY	11
406	HAVERHILL	MASS	25	466	BRISTOL	CONN	11
407	WATERBURY	CONN	24	467	BROCKTON	MASS	11
408	PROVIDENCE	RI	24	468	NEW LONDON	CONN	11
409	FAIRMONT	WV	23	469	ATLANTIC CITY	NJ	10
410	CRANSTON	RI	23	470	HEMPSTEAD	NY	10
411	WARWICK	RI	23	471	CHARLOTTESVILLE	VA	10
412	LAUREL	MISS	23	472	PORTLAND	MASS	9
413	CHARLOTTE	NC	22	473	WORCESTER	MASS	9
414	LEBANON	PENN	22	474	NCRAV	MASS	9
415	TACOMA	WASH	21	475	BETHLEHEM	OKLA	8
416	YAKIMA	WASH	21	476	GREENVILLE	PENN	6
417	CHARLESTON	SC	21	477	FITCHBURG	MASS	6
418	TUSCALOOSA	ALA	21	478	HAZELTON	PENN	5
419	NORTHAMPTON	MASS	21	479	ASHEVILLE	NC	5
				480	GREENVILLE	SC	4

CITIES RANKED BY NON-CARBONATE HARDNESS OF DRINKING WATER					NON-CARB. HARDNESS	
RANK	CITY	STATE	RANK	CITY	STATE	PAGE
(5)					NON-CARB. HARDNESS	
1	RCSWELL	NW	439	60 COVINGTON	KY	68
2	WAUWATOSA	WIS	286	61 NEWPORT	KY	157
3	WILKINSBURG	PENN	341	62 MARION	IND	68
4	PLAINFIELD	NJ	253	63 CEDAR RAPIDS	IOWA	160
5	MCKESSPORT	PENN	245	64 PHOENIX	ARIZ	67
6	ALTONA	PENN	240	65 MUNCIE	IND	139
7	SICUX FALLS	SD	228	66 JEFFERSON CITY	MO	62
8	LAREDO	TEX	227	67 COLUMBUS	OHIO	133
9	NEW KENSINGTON	PENN	216	68 LANGCASTER	PENN	241
10	FOND DU LAC	WIS	206	69 MORGANTOWN	WV	335
11	SALINA	KAN	196	70 OWENSBORO	KY	62
12	NORRISTOWN	PENN	184	71 DAVENPORT	IOWA	460
13	CANTON	OHIO	153	72 ANN ARBOR	MICH	161
14	BROWNSVILLE	TEX	162	73 ST. LOUIS	MO	61
15	LURBECK	TEX	331	74 PHILADELPHIA	PENN	142
16	HUTCHINSON	KAN	418	75 BARBERTON	OHIO	59
17	PARKERSBURG	WV	152	76 JACKSON	MICH	245
18	SICUX CITY	IOWA	144	77 FORT WAYNE	IND	58
19	SALISBURY	FLA	461	78 LANSING	MICH	330
20	SALESBURG	IND	141	79 TOLEDO	OHIO	124
21	ZANESVILLE	OHIO	136	80 TOPEKA	OHIO	57
22	PITTSBURGH	PENN	129	81 DECATUR	KAN	218
23	FORT DODGE	IOWA	360	82 ASHLAND	ILL	357
24	PUERLO	COLORADO	120	83 EVANSVILLE	KY	56
25	CLARKSBURG	WV	145	84 FLINT	IND	156
26	KCKMO	IND	117	85 GRAND FORKS	MICH	55
27	IOWA CITY	IOWA	457	86 ALTON	ILL	212
28	ROCK ISLAND	ILL	115	87 LOUISVILLE	IND	327
29	WHEELING	WV	116	88 NEWPORT	RI	54
30	PEORIA	ILL	109	89 EAST ST. LOUIS	KY	159
31	ANDERSON	IND	104	90 BELLEVILLE	ILL	54
32	TERRE HAUTE	IND	113	91 DANVILLE	ILL	52
33	STEURENVILLE	OHIO	119	92 GRANITE CITY	ILL	103
34	OMAHA	NEB	96	93 ALHAMBRA	ILL	95
35	LAFAVETTE	IND	356	94 WOODBRIDGE	ILL	101
36	AURORA	ILL	94	95 ST. LOUIS	WV	107
37	MARION	OHIO	129	96 KANSAS CITY	MO	246
38	CUNCIL BLUFFS	IOWA	89	97 ALLIANCE	MO	51
39	SAN DIEGO	CAL	346	98 UNIVERSITY CITY	OHIO	229
40	WARREN	OHIO	88	99 MUSKOGEE	MO	51
41	KANSAS CITY	KAN	141	100 OTTUMWA	MO	329
42	GALESBURG	ILL	86	101 HUNTINGTON	OKLA	50
43	VICKSBURG	MISS	358	102 LA CROSSE	IOWA	247
44	JOLIET	ILL	82	103 RURLINGTON	WV	363
45	NEW CASTLE	PENN	106	104 OKLAHOMA CITY	WIS	50
46	DAYTON	OHIO	238	105 LACKAWANNA	IOWA	49
47	FARGO	ND	76	106 LIMA	OKLA	469
48	ST. JOSEPH	MO	383	107 WATERLOO	OKLA	365
49	PORTSMOUTH	MO	74	108 KANKAKEE	OHIO	48
50	INDIANAPOLIS	OHIO	326	109 PACUJAH	IOWA	343
51	INDIANAPOLIS	IND	73	110 OKLAHOMA CITY	ILL	48
52	CINCINNATI	IND	244	111 OKLAHOMA CITY	KY	150
53	KALAMAZOO	MI	352	112 OKLAHOMA CITY	FLA	47
54	SPRINGFIELD	MICH	71	113 OKLAHOMA CITY	NJ	75
55	GARFIELD	OHIO	217	114 OKLAHOMA CITY	OHIO	328
56	YOUNGSTOWN	NJ	355	115 OKLAHOMA CITY	MASS	47
57	HAMILTON	OHIO	69	116 OKLAHOMA CITY	MASS	47
58	HUNTINGTON PARK	CAL	341	117 OKLAHOMA CITY	NJ	200
59	EL PASO	TEX	69	118 OKLAHOMA CITY	TEX	47
			421	119 OKLAHOMA CITY	TENN	446
					NJ	268

(NON-CARB. HARDNESS CONT.)				(NON-CARB. HARDNESS CONT.)			
(6)				(6)			
RANK	CITY	STATE	NON-CARB. HARDNESS	RANK	CITY	STATE	NON-CARB. HARDNESS
120	NEW ORLEANS	LA	44	180	MADISON	WIS	33
121	INGLEWOOD	CAL	44	181	OSHKOSH	WIS	470
122	ROCKFORD	ILL	43	182	LINCOLN	NEB	32
123	EUCLID	OHIO	43	183	PERTH AMBOY	NJ	279
124	LAKESIDE	OHIO	43	184	WACO	TEX	31
125	PHILADELPHIA	PENNA	43	185	NEAPOLK	PENNA	432
126	CLEVELAND HEIGHTS	OHIO	43	186	READING	PENNA	31
127	CLEVELAND	OHIO	43	187	DES MOINES	IOWA	388
128	EAST CLEVELAND	OHIO	43	188	POUGHKEEPSIE	NY	143
129	MINNEAPOLIS	MINN	43	189	CHATTANOOGA	TENN	30
130	MIDDLETON	WIS	43	190	YONKERS	NY	408
131	SHAKER HEIGHTS	OHIO	43	191	ITHACA	NY	29
132	PARMA	OHIO	43	192	NEW BRUNSWICK	NY	315
133	WEST ORANGE	NJ	42	193	NEWARK	NJ	29
134	FLYRIA	OHIO	42	194	POMONA	CAL	274
135	NEW ALBANY	IND	42	195	EAST CHICAGO	IND	349
136	SANTA BARBARA	CAL	42	196	WAUKEGAN	ILL	29
137	POCHESTER	NY	41	197	APPLETON	WIS	121
138	GREEN BAY	WIS	41	198	BLOOMINGTON	IND	29
139	FRIE	PENNA	41	199	RANGOR	WIS	463
140	WASHINGTON	PENNA	40	200	BEAUMONT	TEX	28
141	LORAIN	OHIO	40	201	BILLINGS	WY	417
142	DENVER	COLO	40	202	BATTLE CREEK	MICH	28
143	WEST PALM BEACH	FLA	39	203	EASTON	PENNA	28
144	SPRINGFIELD	ILL	39	204	MICHIGAN CITY	IND	375
145	QUINCY	ILL	39	205	HAMMOND	IND	131
146	MANITOWOC	WIS	39	206	WILMINGTON	DEL	26
147	TAMPA	FLA	38	207	RELOIT	WIS	65
148	DISTRICT OF COLUMBIA	CAL	38	208	SAN ANTONIO	TEX	26
149	LYNWOOD	NY	38	209	KENOSHA	WIS	429
150	NIAGARA FALLS	NY	38	210	WHITE PLAINS	NY	26
151	LOCKPORT	NY	38	211	MUSKEGON	MICH	314
152	WEST NEW YORK	NJ	38	212	NASHVILLE	TENN	25
153	UNION CITY	NJ	38	213	SCHENECTADY	NY	220
154	HACKENSACK	NJ	38	214	RACINE	WIS	413
155	NORWOOD	OHIO	38	215	HAUSAU	WIS	24
156	AUSTIN	TEX	38	216	DAYTONA BEACH	FLA	474
157	CAMDEN	NJ	38	217	EVANSTON	ILL	477
158	ORANGE	NJ	38	218	LEXINGTON	KY	24
159	ALBANY	PENNA	38	219	GARY	IND	105
160	SALT LAKE CITY	UTAH	38	220	OAK PARK	ILL	24
161	EAST ORANGE	NJ	37	221	WYOMING	ILL	125
162	LAKELAND	FLA	37	222	PERMYN	ILL	112
163	NEWINGTON	ILL	36	223	CHICAGO	ILL	110
164	NEWBURGH	NY	36	224	SOUTH GATE	ILL	186
165	CORPUS CHRISTI	TEX	36	225	PORTSMOUTH	CAL	99
166	SARASOTA	PENNA	36	226	GREAT FALLS	WY	47
167	BUFFALO	NY	35	227	WYANDOTTE	WY	445
168	SHREVEPORT	LA	35	228	SAGINAW	MICH	23
169	MOLINE	ILL	34	229	ROCKY MOUNT	NC	225
170	MIAMI	FLA	34	230	SHEBOYGAN	WIS	323
171	MIAMI BEACH	FLA	34	231	CLIFTON	WIS	22
172	COMPTON	CAL	34	232	LINCOLN PARK	MICH	262
173	MANSEFIELD	OHIO	34	233	NUTLEY	NJ	219
174	JACKSON	TENN	33	234	HAMTRAWK	WIS	22
175	ELMIRA	NY	33	235	PASSAIC	NJ	275
176	TRENTON	OHIO	33	236	PATTERSON	NJ	22
177	SANDUSKY	OHIO	33	237	HIGHLAND PARK	MICH	278
178	CHESTER	PENNA	33	238	DEARBORN	MICH	22
179	DALLAS	TEX	33	239			209

NON-CARB. HARDNESS				NON-CARB. HARDNESS			
RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE
240	DETROIT	MICH	22	300	KEARNY	NJ	14
241	FINCHVILLE	MICH	210	301	BLOOMFIELD	NJ	270
242	NEW ORCHARD	NY	21	302	LEWISTON	TEX	260
243	BURLINGTON	VT	303	303	LEWISTON	PENN	14
244	SCRANTON	PENN	21	304	RELEVILLE	PENN	381
245	JAMESTOWN	NY	389	305	ALLOUETTE	PENN	14
246	MOUNT VERNON	NY	21	306	RAYDONNE	PENN	579
247	ROCHESTER	MINN	296	307	PONTIAC	MICH	258
248	AUBURN	MINN	228	308	ATHENS	MICH	14
249	ALBANY	NY	300	309	NEW BRITAIN	CAL	83
250	NEWPORT NEWS	VA	290	310	SANTA ANA	CONN	13
251	RAPID CITY	SD	288	311	PAWTUCKET	CAL	58
252	GLOUCESTER	MASS	20	312	TRCY	RI	44
253	MONROE	MASS	406	313	LANTON	NY	13
254	LYNN	MASS	20	314	JOHNSTOWN	OKLA	310
255	GLENDALE	CAL	167	315	FAIRMONT	PENN	12
256	YORK	CAL	20	316	MONTCLAIR	WV	379
257	WATERTOWN	PENN	190	317	TORRINGTON	NJ	458
258	JERSEY CITY	NY	23	318	ROME	CONN	12
259	WEST ELLIS	NY	395	319	BURBANK	GA	63
260	MILWAUKEE	WIS	19	320	PALM ALTO	CAL	12
261	HOBOKEN	WIS	479	321	FORT SMITH	CAL	20
262	DURHAM	NC	472	322	BAKERSFIELD	ARK	30
263	TYLER	TEX	267	323	MAGN	CAL	11
264	SPRINGFIELD	MO	318	324	PENSACOLA	GA	17
265	DUBUQUE	IOWA	431	325	JOPLIN	FLA	88
266	ELKHART	IOWA	18	326	ALEXANDRIA	MO	11
267	MIDDLETOWN	IND	246	327	FLGIN	LA	242
268	FORT LAUDERDALE	FLA	144	328	BOISE	ILL	163
269	LAWRENCE	MASS	57	329	BIRMINGHAM	ID	11
270	NEW HAVEN	MASS	18	330	BESSEMER	ALA	91
271	PORT HURON	MASS	188	331	MOBILE	ALA	3
272	PANAMA CITY	FLA	59	332	WATERBURY	ALA	2
273	GRAND RAPIDS	FLA	222	333	KEY WEST	CONN	5
274	RICHLAND	CONN	16	334	GAINESVILLE	FLA	64
275	RICHLAND	MICH	61	335	LOWELL	FLA	71
276	LOS ANGELES	IND	23	336	TALLAHASSEE	MASS	10
277	ALABAMA	CAL	17	337	BALTIMORE	FLA	189
278	MASSILLON	VA	27	338	WINSTON-SALEM	MINN	10
279	CHARLESTON	OHIO	438	339	KINGSTON	MINN	230
280	PETERSBURG	WV	347	340	HIGH POINT	NC	113
281	RENO	NEV	456	341	UTICA	NC	357
282	RINGHAMTON	NY	253	342	ROME	NY	321
283	PROVO	UTAH	291	343	PROVIDENCE	NY	311
284	FAYETTEVILLE	NC	16	344	AMSTERDAM	NY	307
285	JACKSON	MISS	435	345	WILMINGTON	RI	399
286	NEW YORK CITY	MISS	16	346	TAUNTON	NY	289
287	ST. PETERSBURG	NY	235	347	CLINTON	NC	9
288	MERIDEN	FLA	303	348	MANCHESTER	MASS	203
289	SANTA MONICA	CAL	78	349	HOLYOKE	MASS	8
290	HAGERSTOWN	CAL	56	350	MERTON	MASS	140
291	BRIDGEPORT	MD	46	351	LA GRANGE	NH	255
292	STAMFORD	CONN	175	352	COLUMBUS	MISS	8
293	CAMBRIDGE	CONN	15	353	SAVANNAH	GA	87
294	GAUSDEN	MASS	62	354	SAN JOSE	GA	86
295	HOT SPRINGS	ALA	179	355	SAN FRANCISCO	GA	90
296	SYRACUSE	ARK	4	356	REDMOOD CITY	CAL	41
297	SPOKANE	NY	11	357	GREENSBORO	CAL	8
298	NEWARK	WASH	15	358	AMARILLO	NC	34
299	TEMPLE	TEX	273	359		TEX	8
			430				415

RANK	CITY	STATE	CITIES RANKED BY FLUORIDATION STATUS			RANK	CITY	STATE	FLUORIDATION STATUS			PAGE
			FLUORIDATION	STATUS	PAGE				FLUORIDATION	STATUS	PAGE	
1	COLORADO SPRINGS	COLO	F-HIGH	NATURAL	50	60	ST. JOSEPH	MO	LOW	NATURAL	244	
2	APARILLO	TEX	F-HIGH	NATURAL	415	61	WACO	TEX	LOW	NATURAL	242	
3	LUBBOCK	TEX	F-HIGH	NATURAL	426	62	INDEPENDENCE	MO	LOW	NATURAL	700	
4	LAREDO	TEX	OPTIMUM	NATURAL	425	63	OGDEN	UTAH	LOW	NATURAL	434	
5	HOUSTON	TEX	OPTIMUM	NATURAL	424	65	PROVO	UTAH	LOW	NATURAL	435	
6	GALVESTON	TEX	OPTIMUM	NATURAL	423	65	SALT LAKE CITY	UTAH	LOW	NATURAL	436	
7	EL PASO	TEX	OPTIMUM	NATURAL	421	66	HAZELTON	PENN	LOW	NATURAL	378	
8	BROWNSVILLE	TEX	OPTIMUM	NATURAL	418	67	PATTERSON	NJ	LOW	NATURAL	278	
9	CHEYENNE	WY	OPTIMUM	NATURAL	480	67	PASSAIC	NJ	LOW	NATURAL	277	
10	PUERLO	COLO	OPTIMUM	NATURAL	52	68	VICKSBURG	MISS	LOW	NATURAL	238	
11	SANTA BARBARA	CAL	OPTIMUM	NATURAL	45	70	PARRISBURG	PENN	LOW	NATURAL	377	
12	AURORA	ILL	OPTIMUM	NATURAL	94	71	CUYAHOGA FALLS	OHIO	LOW	NATURAL	336	
13	JACKSONVILLE	FLA	OPTIMUM	NATURAL	70	72	BILLOXI	MISS	LOW	NATURAL	232	
14	JOLIET	ILL	OPTIMUM	NATURAL	108	73	ERIE	PENN	LOW	NATURAL	376	
15	SAN BERNARDINO	CAL	OPTIMUM	NATURAL	38	74	DAYTON	OHIO	LOW	NATURAL	337	
16	RIVERSIDE	CAL	OPTIMUM	NATURAL	36	75	NEWARK	NJ	LOW	NATURAL	273	
17	PASADENA	CAL	OPTIMUM	NATURAL	31	76	NORWOOD	OHIO	LOW	NATURAL	350	
18	MARION	OHIO	OPTIMUM	NATURAL	346	77	PELLINGHAM	WASH	LOW	NATURAL	448	
19	MASON CITY	IOWA	OPTIMUM	NATURAL	147	78	BREMERTON	WASH	LOW	NATURAL	449	
20	FORT DODGE	IOWA	OPTIMUM	NATURAL	145	79	EVERETT	WASH	LOW	NATURAL	450	
21	ALBUQUERQUE	NM	OPTIMUM	NATURAL	285	80	VALLEY STREAM	NY	LOW	NATURAL	312	
22	ROSMELL	MO	OPTIMUM	NATURAL	286	81	SPOKANE	WASH	LOW	NATURAL	452	
23	COLUMBIA	MO	OPTIMUM	NATURAL	239	82	TACOMA	WASH	LOW	NATURAL	453	
24	ALEXANDRIA	LA	OPTIMUM	NATURAL	163	83	KCPK	NY	LOW	NATURAL	307	
25	GREENVILLE	MISS	OPTIMUM	NATURAL	233	84	YAKIMA	WASH	LOW	NATURAL	455	
26	GREAT FALLS	MONT	OPTIMUM	NATURAL	250	85	HEMPSTEAD	NY	LOW	NATURAL	294	
27	LINCOLN	NEB	LOW	NATURAL	251	86	LEBANON	PENN	LOW	NATURAL	381	
28	BILLINGS	MONT	LOW	NATURAL	248	87	AUBURN	NY	LOW	NATURAL	290	
29	PORTLAND	ORE	LOW	NATURAL	368	88	IRVINGTON	NJ	LOW	NATURAL	268	
30	BUTTE	MONT	LOW	NATURAL	249	89	PECKEN	NJ	LOW	NATURAL	267	
31	CHARLESTON	SC	LOW	NATURAL	402	90	ELIZABETH	NJ	LOW	NATURAL	264	
32	WHITE PLAINS	NY	LOW	NATURAL	314	91	JOLIET	WY	LOW	NATURAL	242	
33	CAMDEN	NJ	LOW	NATURAL	281	92	MCKEESPORT	PENN	LOW	NATURAL	382	
34	ALBUQUERQUE	PENN	LOW	NATURAL	370	93	JERSEY CITY	NJ	LOW	NATURAL	265	
35	RAPID CITY	SD	LOW	NATURAL	406	94	NASHUA	NH	LOW	NATURAL	256	
36	STOUGHTON	MA	LOW	NATURAL	467	95	SANDUSKY	OHIO	LOW	NATURAL	353	
37	COLUMBUS	OHIO	LOW	NATURAL	335	96	CINCINNATI	OHIO	LOW	NATURAL	332	
38	LINDEN	NJ	LOW	NATURAL	271	97	JOHNSTOWN	PENN	LOW	NATURAL	379	
39	MUSKOGEE	OKLA	LOW	NATURAL	363	98	LANTON	OKLA	LOW	NATURAL	362	
40	NEWARK	DELA	LOW	NATURAL	411	99	SPRINGFIELD	OHIO	LOW	NATURAL	355	
41	NEWARK	TENN	LOW	NATURAL	246	100	HACKENSACK	OHIO	LOW	NATURAL	266	
42	SPRINGFIELD	MO	LOW	NATURAL	246	101	BARBERTON	NJ	LOW	NATURAL	330	
43	ARTLENE	TEX	LOW	NATURAL	414	101	BARBERTON	OHIO	LOW	NATURAL	329	
44	KINGSTON	TEX	LOW	NATURAL	257	102	ALLIANCE	CHIO	LOW	NATURAL	265	
45	AUSTIN	TEX	LOW	NATURAL	416	103	GARFIELD	NJ	LOW	NATURAL	282	
46	BEAUMONT	TEX	LOW	NATURAL	417	104	UNION CITY	NJ	LOW	NATURAL	476	
47	KEARNY	NJ	LOW	NATURAL	270	105	SUPERIOR	WIS	LOW	NATURAL	255	
48	CLIFTON	NJ	LOW	NATURAL	262	106	ITHACA	NY	LOW	NATURAL	258	
49	ALTOONA	PENN	LOW	NATURAL	372	107	BAYCENNE	NJ	LOW	NATURAL	258	
50	ALTOONA	PENN	LOW	NATURAL	371	108	WILKES-BARRE	PENN	LOW	NATURAL	352	
51	YORK	PENN	LOW	NATURAL	395	109	9LCCMFELC	NJ	LOW	NATURAL	260	
52	BETHLEHEM	PENN	LOW	NATURAL	373	110	WASH-INGTON	PENN	LOW	NATURAL	391	
53	ALBANY	NY	LOW	NATURAL	288	111	NCRRISTCWN	PENN	LOW	NATURAL	385	
54	PLAINFIELD	NJ	LOW	NATURAL	280	112	WARREN	OHIO	LOW	NATURAL	358	
55	MANCHESTER	NH	LOW	NATURAL	255	113	WEST NEW YORK	NJ	LOW	NATURAL	283	
56	MANCHESTER	OHIO	LOW	NATURAL	360	114	NUTLEY	NJ	LOW	NATURAL	275	
57	SAN ANGELO	TEX	LOW	NATURAL	428	115	WEST ORANGE	NJ	LOW	NATURAL	284	
58	SAN ANTONIO	TEX	LOW	NATURAL	429	116	EAST ORANGE	NJ	LOW	NATURAL	263	
59	MONTCLAIR	NJ	LOW	NATURAL	272	117	BELLEVILLE	NJ	LOW	NATURAL	259	
						118	PATTIESBURG	MISS	LOW	NATURAL	234	
						119	SHARON	PENN	LOW	NATURAL	390	

RANK	CITY	STATE	FLUORIDATION STATUS	PAGE	(10)	RANK	CITY	STATE	FLUORIDATION STATUS	PAGE
120	MASSILLON	OHIO	LOW NATURAL	347		130	MELROSE	MASS	LOW NATURAL	193
121	BRANFON	NJ	LOW NATURAL	347		131	NEW BEDFORD	MASS	LOW NATURAL	144
122	BRANFON	PA	LOW NATURAL	349		132	SANTA ANA	CAL	LOW NATURAL	144
123	BRANFON	OHIO	LOW NATURAL	349		133	SAN ANTONIO	CAL	LOW NATURAL	42
124	MIDDLETOWN	OHIO	LOW NATURAL	349		134	PITTSFIELD	MASS	LOW NATURAL	157
125	RENC	NEV	LOW NATURAL	255		135	QUINCY	MASS	LOW NATURAL	198
126	LIMA	OHIO	LOW NATURAL	343		136	REVERE	MASS	LOW NATURAL	199
127	NEW BRUNSWICK	NJ	LOW NATURAL	274		137	STICKTON	CAL	LOW NATURAL	48
128	RECONO BEACH	CAL	LOW NATURAL	33		138	SOMERVILLE	MASS	LOW NATURAL	201
129	POMONA	CAL	LOW NATURAL	32		139	SPRINGFIELD	MASS	LOW NATURAL	202
130	SACRAMENTO	CAL	LOW NATURAL	37		140	TAUNTON	MASS	LOW NATURAL	203
131	RICHMOND	CAL	LOW NATURAL	35		141	WALTHAM	MASS	LOW NATURAL	204
132	REDWOOD CITY	CAL	LOW NATURAL	34		142	WORCESTER	MASS	LOW NATURAL	205
133	SAN JOSE	CAL	LOW NATURAL	41		143	SOUTH GATE	CAL	LOW NATURAL	47
134	OAKLAND	CAL	LOW NATURAL	29		144	SANTA MONICA	CAL	LOW NATURAL	46
135	LYNWOOD	CAL	LOW NATURAL	28		145	MACON	GA	LOW NATURAL	88
136	SIoux CITY	IOWA	LOW NATURAL	149		146	COLUMBUS	GA	LOW NATURAL	86
137	LES ANGELES	CAL	LOW NATURAL	27		147	WEST PALM BEACH	FLA	LOW NATURAL	81
138	HUTCHINSON	KAN	LOW NATURAL	151		148	TAMPA	FLA	LOW NATURAL	80
139	LONG BEACH	CAL	LOW NATURAL	26		149	TALLAHASSEE	FLA	LOW NATURAL	79
140	BELMONT	IND	LOW NATURAL	120		150	PANAMA CITY	FLA	LOW NATURAL	76
141	TUCSON	ARIZ	LOW NATURAL	9		151	INGLEWOOD	CAL	LOW NATURAL	25
142	WICHITA	KAN	LOW NATURAL	155		152	HUNTINGTON PARK	CAL	LOW NATURAL	24
143	PHENIX	ARIZ	LOW NATURAL	8		153	GLENDALE	CAL	LOW NATURAL	23
144	MONTGOMERY	ALA	LOW NATURAL	6		154	FRESNO	CAL	LOW NATURAL	22
145	GADSDEN	ALA	LOW NATURAL	4		155	COMPTON	CAL	LOW NATURAL	21
146	BIRMINGHAM	ALA	LOW NATURAL	3		156	BURBANK	CAL	LOW NATURAL	20
147	NEWPORT	KY	LOW NATURAL	160		157	BEVERLY HILLS	CAL	LOW NATURAL	19
148	BESSEMER	ALA	LOW NATURAL	2		158	BERKELEY	CAL	LOW NATURAL	18
149	TERRE HAUTE	IND	LOW NATURAL	137		159	PORT HURON	MICH	LOW NATURAL	222
150	LAKELAND	FLA	LOW NATURAL	172		160	BAKERSFIELD	CAL	LOW NATURAL	17
151	BATON ROUGE	LA	LOW NATURAL	164		161	ALHAMBRA	CAL	LOW NATURAL	16
152	LAFAYETTE	LA	LOW NATURAL	165		162	ALAMEDA	CAL	LOW NATURAL	15
153	LAKE CHARLES	LA	LOW NATURAL	166		163	DULUTH	MINN	LOW NATURAL	226
154	MONROE	LA	LOW NATURAL	167		164	HOT SPRINGS	ARK	LOW NATURAL	11
155	NEW ORLEANS	LA	LOW NATURAL	168		165	FORT SMITH	ARK	LOW NATURAL	10
156	SHREVEPORT	LA	LOW NATURAL	169		166	PINE BLUFF	ARK	FLUORIDATED IN 1969	14
157	FORT LAUDERDALE	FLA	LOW NATURAL	68		167	ATLANTA	GA	FLUORIDATED IN 1969	84
158	LEWISTON	ME	LOW NATURAL	171		168	NEW BEDFORD	IND	FLUORIDATED IN 1969	134
159	BURLINGTON	ME	LOW NATURAL	172		169	CHAPLAIN	MASS	FLUORIDATED IN 1969	138
160	CUMBERLAND	ME	LOW NATURAL	173		170	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
161	POCAHONTAS	MD	LOW NATURAL	174		171	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
162	POCAHONTAS	MD	LOW NATURAL	174		172	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
163	ROSE	MO	LOW NATURAL	92		173	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
164	BOSTON	MASS	LOW NATURAL	171		174	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
165	BRIGHTON	MASS	LOW NATURAL	171		175	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
166	SAVANNAH	GA	LOW NATURAL	178		176	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
167	CHELSEA	MASS	LOW NATURAL	180		177	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
168	CHICPEE	MASS	LOW NATURAL	181		178	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
169	EVERETT	MASS	LOW NATURAL	182		179	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
170	FALL RIVER	MASS	LOW NATURAL	183		180	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
171	FITCHBURG	MASS	LOW NATURAL	184		181	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
172	GLOUCESTER	MASS	LOW NATURAL	185		182	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
173	HAVERHILL	MASS	LOW NATURAL	186		183	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
174	HOLYOKE	MASS	LOW NATURAL	187		184	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
175	LAWRENCE	MASS	LOW NATURAL	188		185	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
176	LOWELL	MASS	LOW NATURAL	189		186	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
177	LYNN	MASS	LOW NATURAL	190		187	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
178	MALDEN	MASS	LOW NATURAL	191		188	CHAPLAIN	MASS	FLUORIDATED IN 1969	133
179	MEDFORD	MASS	LOW NATURAL	192		189	CHAPLAIN	MASS	FLUORIDATED IN 1969	133

RANK	CITY	STATE	FLUORIDATION STATUS	PAGE	(11)	RANK	CITY	STATE	FLUORIDATION STATUS	PAGE
240	BRIDGEPORT	CONN	FLUORIDATED IN 1967	53		300	HARTFORD	CONN	FLUORIDATED IN 1960	55
241	ELGIN	ILL	FLUORIDATED IN 1967	104		301	BRISTOL	CONN	FLUORIDATED IN 1960	54
242	SOUTH BEND	IND	FLUORIDATED IN 1967	136		302	WILMINGTON	DEL	FLUORIDATED IN 1960	65
243	HAMTRAMCK	MICH	FLUORIDATED IN 1967	214		303	DECATUR	ILL	FLUORIDATED IN 1960	102
244	FERNDALE	MICH	FLUORIDATED IN 1967	211		304	ANASTON	ALA	FLUORIDATED IN 1960	1
245	DETROIT	MICH	FLUORIDATED IN 1967	210		305	DES MOINES	IOWA	FLUORIDATED IN 1959	143
246	DEARBORN	MICH	FLUORIDATED IN 1967	209		306	NIAGARA FALLS	NY	FLUORIDATED IN 1959	304
247	PONTIAC	MICH	FLUORIDATED IN 1967	221		307	LOCKPORT	NY	FLUORIDATED IN 1959	299
248	LINCOLN PARK	MICH	FLUORIDATED IN 1967	219		308	GRAND FORKS	ND	FLUORIDATED IN 1958	327
249	TROY	NY	FLUORIDATED IN 1967	310		309	NEW KENSINGTON	PENN	FLUORIDATED IN 1958	384
250	COLUMBIA	SC	FLUORIDATED IN 1967	403		310	OTTUMWA	IOWA	FLUORIDATED IN 1958	148
251	UTICA	NY	FLUORIDATED IN 1967	311		311	ATLANTIC CITY	NJ	FLUORIDATED IN 1958	257
252	LACKAWANNA	NY	FLUORIDATED IN 1967	298		312	PEORIA	ILL	FLUORIDATED IN 1958	113
253	ENID	OKLA	FLUORIDATED IN 1967	361		313	MORILE	ALA	FLUORIDATED IN 1958	5
254	DALLAS	TEX	FLUORIDATED IN 1966	420		314	TORRINGTON	CONN	FLUORIDATED IN 1958	63
255	NORMAN	OKLA	FLUORIDATED IN 1966	364		315	MUNCIE	IND	FLUORIDATED IN 1957	133
256	WILLIAMSPORT	PENN	FLUORIDATED IN 1966	394		316	TOPEKA	KAN	FLUORIDATED IN 1957	154
257	FLINT	MICH	FLUORIDATED IN 1966	212		317	ST. CLOUD	MINN	FLUORIDATED IN 1957	229
258	DAYTONA BEACH	FLA	FLUORIDATED IN 1966	115		318	MINNEAPOLIS	MINN	FLUORIDATED IN 1957	321
259	EAST CHICAGO	ILL	FLUORIDATED IN 1966	116		319	SALEIGH	NC	FLUORIDATED IN 1957	322
260	ROCKFORD	ILL	FLUORIDATED IN 1966	162		320	SAUKETEC	OHIO	FLUORIDATED IN 1957	348
261	PAIDGAH	IOWA	FLUORIDATED IN 1966	162		321	NEWEN	OHIO	FLUORIDATED IN 1956	332
262	WATERLOO	IOWA	FLUORIDATED IN 1966	150		322	CLEVELAND HEIGHTS	OHIO	FLUORIDATED IN 1956	333
263	WATERLOO	IOWA	FLUORIDATED IN 1966	140		323	CLEVELAND	OHIO	FLUORIDATED IN 1956	351
264	WILSON	MISS	FLUORIDATED IN 1965	231		324	PARMEL	OHIO	FLUORIDATED IN 1956	340
265	LAUREL	MISS	FLUORIDATED IN 1965	236		325	EUCLID	OHIO	FLUORIDATED IN 1956	338
266	YONKERS	NY	FLUORIDATED IN 1965	319		326	EAST CLEVELAND	OHIO	FLUORIDATED IN 1956	354
267	SYRACUSE	NY	FLUORIDATED IN 1965	315		327	SHAKER HEIGHTS	OHIO	FLUORIDATED IN 1956	342
268	ASHEVILLE	NC	FLUORIDATED IN 1965	316		328	LAKEWOOD	OHIO	FLUORIDATED IN 1956	112
269	SALEM	ORE	FLUORIDATED IN 1965	369		329	OAK PARK	ILL	FLUORIDATED IN 1956	110
270	MOUNT VERNON	NY	FLUORIDATED IN 1965	300		330	MAYWOOD	ILL	FLUORIDATED IN 1956	287
271	FORT WORTH	TEX	FLUORIDATED IN 1965	422		331	SANTA FE	NM	FLUORIDATED IN 1956	125
272	TRENTON	NJ	FLUORIDATED IN 1964	281		332	GARY	IND	FLUORIDATED IN 1956	96
273	KENOSHA	WIS	FLUORIDATED IN 1964	468		333	BERWYN	ILL	FLUORIDATED IN 1956	100
274	MAUMATOSA	WIS	FLUORIDATED IN 1964	478		334	CICERO	ILL	FLUORIDATED IN 1956	87
275	BINGHAMTON	NY	FLUORIDATED IN 1964	291		335	CHICAGO	ILL	FLUORIDATED IN 1956	75
276	KANSAS CITY	KAN	FLUORIDATED IN 1964	152		336	LA GRANGE	GA	FLUORIDATED IN 1956	30
277	KANKAKEE	ILL	FLUORIDATED IN 1964	109		337	ORLANDO	FLA	FLUORIDATED IN 1956	85
278	MISHAWAKA	IND	FLUORIDATED IN 1964	132		338	PALM ALTYC	CAL	FLUORIDATED IN 1955	101
279	EVANSVILLE	IND	FLUORIDATED IN 1963	123		339	AUGUSTA	GA	FLUORIDATED IN 1955	245
280	BURLINGTON	IOWA	FLUORIDATED IN 1963	138		340	DANVILLE	MO	FLUORIDATED IN 1955	43
281	ANDERSON	IND	FLUORIDATED IN 1963	119		341	ST. LOUIS	MO	FLUORIDATED IN 1955	111
282	ROCK ISLAND	ILL	FLUORIDATED IN 1963	116		342	SAINT MATEO	CAL	FLUORIDATED IN 1955	292
283	UNIVERSITY CITY	MO	FLUORIDATED IN 1963	247		343	MOLINE	ILL	FLUORIDATED IN 1955	344
284	NEWTON	MASS	FLUORIDATED IN 1963	195		344	AUFFALC	VA	FLUORIDATED IN 1955	447
285	JEFFERSON CITY	MO	FLUORIDATED IN 1963	241		345	LORAIN	OHIO	FLUORIDATED IN 1955	357
286	RICHMOND	IND	FLUORIDATED IN 1963	135		346	ROANOKE	VA	FLUORIDATED IN 1955	324
287	LANSING	MICH	FLUORIDATED IN 1963	218		347	TOLEDO	OHIO	FLUORIDATED IN 1955	339
288	JAMESTOWN	NY	FLUORIDATED IN 1963	296		348	WILMINGTON	NC	FLUORIDATED IN 1954	365
289	VANCOUVER	WASH	FLUORIDATED IN 1963	434		349	ELYRIA	OHIO	FLUORIDATED IN 1954	457
290	WATERLOO	NY	FLUORIDATED IN 1962	313		350	OKLAHOMA CITY	OKLA	FLUORIDATED IN 1954	386
291	JACKSON	TENN	FLUORIDATED IN 1962	409		351	PHILADELPHIA	PENN	FLUORIDATED IN 1954	456
292	DURHAM	NC	FLUORIDATED IN 1962	318		352	CHARLESTON	WV	FLUORIDATED IN 1954	114
293	COUNCIL BLUFFS	IOWA	FLUORIDATED IN 1962	141		353	QUINCY	ILL	FLUORIDATED IN 1954	138
294	MORGANTOWN	WV	FLUORIDATED IN 1961	403		354	KENTON	KY	FLUORIDATED IN 1954	2
295	JENKINS CITY	WV	FLUORIDATED IN 1961	380		355	DENVER	COLOR	FLUORIDATED IN 1954	237
296	NEWARK CITY	NJ	FLUORIDATED IN 1960	228		356	ALBUQUERQUE	NM	FLUORIDATED IN 1953	82
297	ROCHESTER	PENN	FLUORIDATED IN 1960	228		357	ALBUQUERQUE	NM	FLUORIDATED IN 1953	82
298	ROCHESTER	MINN	FLUORIDATED IN 1960	228		358	METOLIAN	GA	FLUORIDATED IN 1953	82
299	MIDDLETOWN	CONN	FLUORIDATED IN 1960	57		359	ALBANY	GA	FLUORIDATED IN 1953	82

RANK	CITY	STATE	FLUORINATION STATUS	PAGE	(12)	RANK	CITY	STATE	FLUORINATION STATUS	PAGE
360	ELMIRA	NY	FLUORIDATED IN 1953	293		420	ANN ARBOR	MICH	FLUORIDATED IN 1951	206
361	ELKHART	IND	FLUORIDATED IN 1953	122		421	HAGERSTOWN	MD	FLUORIDATED IN 1951	175
362	LAFAYETTE	IND	FLUORIDATED IN 1953	129		422	ATHENS	GA	FLUORIDATED IN 1951	83
363	HAMMOND	IND	FLUORIDATED IN 1953	126		423	TUSCALOOSA	ALA	FLUORIDATED IN 1951	7
364	OWENSBORO	KY	FLUORIDATED IN 1953	161		424	INDIANAPOLIS	IND	FLUORIDATED IN 1951	127
365	LOMA CITY	MO	FLUORIDATED IN 1953	146		425	FORT WAYNE	IND	FLUORIDATED IN 1951	124
366	HUNTINGTON	WV	FLUORIDATED IN 1953	459		426	LOUISVILLE	KY	FLUORIDATED IN 1951	159
367	FAIRMONT	WV	FLUORIDATED IN 1953	458		427	WINSTON-SALEM	NC	FLUORIDATED IN 1951	325
368	WILKINSBURG	PENN	FLUORIDATED IN 1953	393		428	NEW ROCHELLE	NY	FLUORIDATED IN 1951	302
369	NEW CASTLE	PENN	FLUORIDATED IN 1953	383		429	DUBUQUE	IA	FLUORIDATED IN 1951	144
370	MILWAUKEE	WIS	FLUORIDATED IN 1953	472		430	EAU CLAIRE	WIS	FLUORIDATED IN 1951	465
371	WEST ELLIS	WIS	FLUORIDATED IN 1953	479		431	TEMPLE	TEX	FLUORIDATED IN 1951	430
372	HAMILTON	OHIO	FLUORIDATED IN 1953	341		432	LYNCHBURG	VA	FLUORIDATED IN 1951	441
373	TULSA	OKLA	FLUORIDATED IN 1953	366		433	FOND DU LAC	WIS	FLUORIDATED IN 1950	466
374	PORTSMOUTH	OHIO	FLUORIDATED IN 1953	352		434	APPLETON	WIS	FLUORIDATED IN 1950	463
375	PORT ARTHUR	TEX	FLUORIDATED IN 1953	427		435	WHEELING	WV	FLUORIDATED IN 1950	462
376	NEWPORT NEWS	VA	FLUORIDATED IN 1953	442		436	RAVINE	WIS	FLUORIDATED IN 1950	474
377	DANVILLE	VA	FLUORIDATED IN 1953	440		437	OSHKOSH	WIS	FLUORIDATED IN 1950	473
378	ALEXANDRIA	VA	FLUORIDATED IN 1953	446		438	NEW BRITAIN	CONN	FLUORIDATED IN 1950	26
379	NEWPORT	RI	FLUORIDATED IN 1953	369		439	GAINESVILLE	FLA	FLUORIDATED IN 1949	367
380	CHATTANOOGA	TENN	FLUORIDATED IN 1953	413		440	CHARLOTTE	NC	FLUORIDATED IN 1949	347
381	CHATTANOOGA	TENN	FLUORIDATED IN 1952	408		441	BELLEVILLE	WIS	FLUORIDATED IN 1949	440
382	NORFOLK	VA	FLUORIDATED IN 1952	443		442	FRANKLIN	WIS	FLUORIDATED IN 1949	440
383	RICHMOND	VA	FLUORIDATED IN 1952	446		443	SWANSEA	WIS	FLUORIDATED IN 1949	105
384	PORTSMOUTH	VA	FLUORIDATED IN 1952	445		444	SWANSEA	WIS	FLUORIDATED IN 1949	105
385	EASTON	PENN	FLUORIDATED IN 1952	375		445	NEWBURGH	NY	FLUORIDATED IN 1946	495
386	CRANSTON	RI	FLUORIDATED IN 1952	356		446	GRAND RAPIDS	MICH	FLUORIDATED IN 1945	301
387	BURLINGTON	VT	FLUORIDATED IN 1952	437		447	CONCORD	NH	FLUORIDATED IN 1945	213
388	PROVIDENCE	RI	FLUORIDATED IN 1952	399		448	ST. PETERSBURG	FLA	UNCERTAIN	254
389	MAUSAU	WIS	FLUORIDATED IN 1952	477		449	EUGENE	ORE	UNCERTAIN	78
390	YOUNGSTOWN	OHIO	FLUORIDATED IN 1952	359		450	PENSACOLA	FLA	UNCERTAIN	367
391	DAVENPORT	IOWA	FLUORIDATED IN 1952	142		451	CAMBRIDGE	MASS	UNCERTAIN	179
392	HIGH POINT	NC	FLUORIDATED IN 1952	321		452	BANGOR	ME	UNCERTAIN	170
393	CEDAR RAPIDS	IOWA	FLUORIDATED IN 1952	139		453	KEY WEST	FLA	UNCERTAIN	71
394	ROCKY MOUNT	NC	FLUORIDATED IN 1952	323		454	STAMFORD	CONN	UNCERTAIN	62
395	SAN FRANCISCO	CAL	FLUORIDATED IN 1952	40		455	RAY CITY	MICH	UNCERTAIN	268
396	FAYETTEVILLE	NC	FLUORIDATED IN 1952	319		456	ROCHESTER	NY	UNCERTAIN	306
397	FARGO	ND	FLUORIDATED IN 1952	326		457	NORTHAMPTON	MASS	UNCERTAIN	196
398	KCKMOC	IND	FLUORIDATED IN 1952	128		458	AMSTERDAM	NY	UNCERTAIN	289
399	MICHIGAN CITY	IND	FLUORIDATED IN 1952	131		459	PERTH AMBOY	NJ	UNCERTAIN	279
400	MARION	IND	FLUORIDATED IN 1952	130		460	AKRON	OHIO	UNCERTAIN	328
401	WAUKEGAN	ILL	FLUORIDATED IN 1952	118		461	COVINGTON	KY	UNCERTAIN	157
402	ASHLAND	FLA	FLUORIDATED IN 1952	156		462	CANTON	OHIO	UNCERTAIN	331
403	MIAMI BEACH	FLA	FLUORIDATED IN 1952	74		463	KANSAS CITY	MO	UNCERTAIN	243
404	RCME	GA	FLUORIDATED IN 1952	89		464	GALESBURG	ILL	UNCERTAIN	106
405	BEVERLY	MASS	FLUORIDATED IN 1952	176		465	GREENSBORO	NC	UNCERTAIN	320
406	POUGHKEEPSIE	NY	FLUORIDATED IN 1952	305		466	SAN DIEGO	CAL	UNCERTAIN	39
407	SALEM	MASS	FLUORIDATED IN 1952	200		467	ROYAL CAK	MICH	UNCERTAIN	223
408	BALTIMORE	MD	FLUORIDATED IN 1952	173		468	SCHENECTADY	NY	UNCERTAIN	368
409	DISTRICT OF COLUMBIA	FLA	FLUORIDATED IN 1952	66		469	PITTSBURGH	PENN	UNCERTAIN	387
410	MIAMI	FLA	FLUORIDATED IN 1952	73		470	SAGINAW	MICH	UNCERTAIN	224
411	ST. PAUL	MINN	FLUORIDATED IN 1952	230		471	LA CROSSE	WIS	UNCERTAIN	465
412	HIGHLAND PARK	MICH	FLUORIDATED IN 1952	215		472	PARKERSBURG	WV	UNCERTAIN	461
413	KALAPAZOO	MICH	FLUORIDATED IN 1951	217		473	GREEN BAY	WIS	UNCERTAIN	467
414	JACKSON	MICH	FLUORIDATED IN 1951	216		474	CHARLOTTEVILLE	VA	UNCERTAIN	439
415	WYANDOTTE	MICH	FLUORIDATED IN 1951	225		475	WICHITA FALLS	TEX	UNCERTAIN	433
416	NORTH LITTLE ROCK	ARK	FLUORIDATED IN 1951	13		476	TYLER	TEX	UNCERTAIN	421
417	UTICA	NY	FLUORIDATED IN 1951	222		477	GREENVILLE	SC	UNCERTAIN	404
418	MUSKEGON	MICH	FLUORIDATED IN 1951	207		478	WINDSOCKET	RI	UNCERTAIN	401
419	BATTLE CREEK	MICH	FLUORIDATED IN 1951	207		479	MARWICK	NY	UNCERTAIN	400
						480	CORPUS CHRISTI	TEX	UNCERTAIN	419

RANK		CITY	STATE	AVERAGE PRECIP.	PAGE	AVERAGE ANNUAL PRECIPITATION {13}		RANK	CITY	STATE	AVERAGE PRECIP.	PAGE
1	MOBILE	ALA	67	5	60	HAZELTON	PENN	47	378			
2	FORT LAUDERDALE	FLA	65	68	61	JOHNSTOWN	PENN	47	379			
3	NEW ORLEANS	LA	63	168	62	HEMPSTEAD	NY	47	294			
4	BILLOXI	MISS	61	232	63	FAYETTEVILLE	NC	47	319			
5	WEST PALM BEACH	FLA	61	81	64	POUGHKEEPSIE	NY	47	305			
6	PENSACOLA	FLA	61	77	65	LINDEN	NJ	47	271			
7	LAFAYETTE	LA	59	165	66	ELIZABETH	NJ	47	264			
8	BATON ROUGE	LA	59	164	67	VALLEY STREAM	NY	47	312			
9	ALEXANDRIA	LA	58	163	68	WAGSOKET	RI	47	401			
10	HATTIESBURG	MISS	58	234	69	GREENVILLE	SC	47	404			
11	PANAMA CITY	FLA	58	76	70	COLUMBIA	SC	46	403			
12	LAKE CHARLES	LA	57	166	71	NEWPORT NEWS	VA	46	442			
13	LAUREL	MISS	56	236	72	PORTSMOUTH	VA	46	445			
14	TALLAHASSEE	FLA	56	79	73	PORTSMOUTH	VA	46	445			
15	MIDDLETOWN	CONN	56	57	74	PANTUCKET	RI	46	398			
16	MERIDIAN	MISS	55	237	75	NEW ROCHELLE	NY	46	302			
17	PORT ARTHUR	TEX	55	427	76	QUINCY	MASS	46	198			
18	MONROE	LA	54	167	77	PERTH AMBOY	NJ	46	279			
19	GADSDEN	ALA	54	4	78	TAUNTON	MASS	46	203			
20	BIRMINGHAM	ALA	53	3	79	NEW BRUNSWICK	NJ	46	274			
21	BESSEMER	ALA	53	2	80	GLOUCESTER	MASS	46	185			
22	TUSCALOOSA	ALA	53	7	81	ROME	NY	46	307			
23	MONTGOMERY	ALA	53	6	82	WATERBURY	CONN	46	64			
24	ST. PETERSBURG	FLA	53	78	83	MACON	GA	46	88			
25	HOT SPRINGS	ARK	53	11	84	MERIDEN	CONN	46	56			
26	CHATTANOOGA	TENN	53	408	85	BRISTOL	CONN	46	54			
27	BEAUMONT	TEX	53	417	86	PADUCAH	KY	45	162			
28	JACKSON	TENN	52	409	87	SHREVEPORT	LA	45	169			
29	ROME	GA	52	89	88	SAVANNAH	GA	45	90			
30	JACKSONVILLE	FLA	52	70	89	FALL RIVER	MASS	45	183			
31	ANNISTON	ALA	52	1	90	DURHAM	NC	45	318			
32	LAKELAND	FLA	51	72	91	EASTON	PENN	45	375			
33	DAYTONA BEACH	FLA	51	67	92	RALEIGH	NC	45	322			
34	ORLANDO	FLA	51	75	93	ROCKY MOUNT	NC	45	323			
35	GREENVILLE	MISS	51	233	94	HOUSTON	TEX	45	424			
36	JACKSON	MISS	50	235	95	CHARLESTON	SC	45	402			
37	PORTLAND	ORE	50	368	96	CHARLESTON	WV	45	456			
38	WHITE PLAINS	NY	50	314	97	KNOXVILLE	TENN	45	411			
39	PINE BLUFF	ARK	50	14	98	NASHVILLE	TENN	45	413			
40	LA GRANGE	GA	49	87	99	GALVESTON	TEX	45	423			
41	COLUMBUS	GA	49	86	100	CHARLOTTEVILLE	VA	44	439			
42	TAMPA	FLA	49	80	101	JOHNSON CITY	TENN	44	410			
43	ATLANTA	GA	49	84	102	WEST NEW YORK	NJ	44	283			
44	ATHENS	GA	49	83	103	NORRISTOWN	PENN	44	385			
45	ALBANY	GA	49	82	104	UNION CITY	NJ	44	282			
46	WILMINGTON	NC	49	324	105	CHICOPEE	MASS	44	181			
47	PLAINFIELD	NJ	49	280	106	HOLYOKE	MASS	44	187			
48	VICKSBURG	MISS	49	238	107	PITTSFIELD	MASS	44	197			
49	MEMPHIS	TENN	49	412	108	HOBOKEN	NJ	44	267			
50	CLIFTON	NJ	48	262	109	JERSEY CITY	NJ	44	269			
51	GARFIELD	NJ	48	265	110	WILMINGTON	DEL	44	65			
52	PASSAIC	NJ	48	277	111	STAMFORD	CONN	44	62			
53	PATTERSON	NJ	48	278	112	NORWALK	CONN	44	61			
54	HACKENSACK	NJ	48	266	113	NEW LONDON	CONN	44	60			
55	GAINSVILLE	FLA	48	69	114	NEW HAVEN	CONN	44	59			
56	MIAMI	FLA	47	73	115	BLOOMINGTON	IND	44	120			
57	TORRINGTON	CONN	47	63	116	OWENSBORO	KY	43	161			
58	NORTH LITTLE ROCK	ARK	47	13	117	LEWISTON	ME	43	171			
59	LITTLE ROCK	ARK	47	12	118	LEXINGTON	KY	43	158			
					119	AUGUSTA	GA	43	85			

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120	MOUNT VERNON	NY	43	300
121	SPRINGFIELD	MASS	43	202
122	LEBANON	PENN	43	381
123	WINSTON-SALEM	NC	43	325
124	NORTHAMPTON	MASS	43	196
125	WORCESTER	MASS	43	205
126	JAMESTOWN	NY	43	296
127	JOPLIN	MO	43	242
128	YONKERS	NY	43	315
129	NEW BEDFORD	MASS	43	194
130	CHARLCITE	NC	43	317
131	NORFOLK	VA	43	443
132	FARMONT	WV	43	458
133	MORGANTOWN	WV	43	460
134	CLARKSBURG	WV	42	457
135	PETERSBURG	VA	42	444
136	RICHMOND	VA	42	446
137	ALLENSTON	PENN	42	371
138	UTICA	NY	42	311
139	BETHLEHEM	PENN	42	373
140	BAYONNE	NJ	42	258
141	NEW YORK CITY	NY	42	303
142	NEWBURGH	NY	42	301
143	HIGH POINT	NC	42	321
144	GREENSBORO	NC	42	320
145	NEWARK	NJ	42	268
146	LAURENCE	MASS	42	268
147	TEVENTON	NJ	42	268
148	KEARNY	NJ	42	270
149	ASHLAND	KY	42	156
150	MIAMI BEACH	FLA	42	74
151	BALTIMORE	MD	42	173
152	FITCHBURG	MASS	42	184
153	BRIDGEPORT	CONN	42	53
154	PORTLAND	ME	41	172
155	NEW ALBANY	IND	41	134
156	DISTRICT OF COLUMBIA	IND	41	66
157	LOWELL	MASS	41	189
158	LOUISVILLE	KY	41	159
159	EVANSVILLE	IND	41	123
160	MUNCIE	IND	41	133
161	FORT SMITH	ARK	41	10
162	LANCASTER	PENN	41	380
163	YOUNGSTOWN	OHIO	41	359
164	TYLER	TEX	41	431
165	STUEBENVILLE	OHIO	41	356
166	MIDDLETOWN	OHIO	41	348
167	MUSKOGEE	OKLA	41	363
168	ATLANTIC CITY	NJ	41	257
169	SPRINGFIELD	MO	41	246
170	PORTSMOUTH	OHIO	41	352
171	HUNTINGTON	WV	41	459
172	DANVILLE	VA	41	440
173	ROANOKE	VA	41	447
174	ALEXANDRIA	VA	40	438
175	TRENTON	NJ	40	281
176	KINGSTON	NY	40	297
177	SCRANTON	PENN	40	389
178	YORK	PENN	40	395
179	READING	PENN	40	388

RANK	CITY	STATE	AVERAGE PRECIP.	PAGE
180	HAMILTON	OHIO	40	341
181	WASHINGTON	PENN	40	391
182	WATERTOWN	NY	40	313
183	LAFAYETTE	IND	40	129
184	ANDERSON	IND	40	119
185	NEW BRITAIN	CONN	40	58
186	HARTFORD	CONN	40	55
187	NEWPORT	KY	39	160
188	BANGOR	ME	39	170
189	BROCKTON	MASS	39	178
190	KEY WEST	FLA	39	71
191	COVINGTON	KY	39	157
192	RICHMOND	IND	39	135
193	INDIANAPOLIS	IND	39	127
194	NEWARK	OHIO	39	349
195	MANFIELD	OHIO	39	345
196	NEWPORT	RI	39	397
197	WILKES-BARRE	PENN	39	392
198	MONTCLAIR	NJ	39	252
199	MANCHESTER	NH	39	575
200	ALBUQUA	PENN	39	252
201	ORANGE	MA	39	252
202	WILMINGTONSPORT	NJ	39	276
203	SALEM	PENN	39	394
204	NUTLEY	ORE	39	369
205	LYNCHBURG	NJ	39	275
206	COLUMBIA	VA	39	441
207	PARKERSBURG	WV	39	461
208	PROVIDENCE	RI	39	399
209	BLOOMFIELD	NJ	39	260
210	WARWICK	RI	39	259
211	UNIVERSITY CITY	MO	39	400
212	EAST ORANGE	NJ	39	247
213	CRANSTON	RI	39	263
214	CRANSTON	RI	39	396
215	WEST ORANGE	OHIO	39	350
216	SPRINGFIELD	NJ	39	284
217	CINCINNATI	OHIO	39	355
218	NEWTON	MASS	38	195
219	KOKOMO	IND	38	128
220	MEDFORD	MASS	38	192
221	BOSTON	MASS	38	177
222	MELROSE	MASS	38	193
223	WALTHAM	MASS	38	204
224	EVERETT	MASS	38	182
225	MALEN	MASS	38	191
226	CHELSEA	MASS	38	180
227	TERRE HAUTE	IND	38	137
228	SOMERVILLE	MASS	38	201
229	REVERE	MASS	38	199
230	LYNN	MASS	38	186
231	HAVERHILL	MASS	38	179
232	CAMBRIDGE	MASS	38	95
233	BELLEVILLE	ILL	37	93
234	ALTON	ILL	37	103
235	EAST ST. LOUIS	ILL	37	102
236	DECATUR	MASS	37	200
237	SALEM			

				(AVERAGE PRECIPITATION CONT.)							
RANK	CITY	STATE	AVERAGE PRECIP.	PAGE	(15)	RANK	CITY	STATE	AVERAGE PRECIP.	PAGE	
240	BEVERLY	MASS	37	176		300	ROCKFORD	ILL	34	115	
241	GRANITE CITY	ILL	37	107		301	JOLIET	ILL	34	108	
242	WAGON	IND	37	130		302	GALESBURG	ILL	34	106	
243	CUYAHOGA FALLS	OHIO	37	336		303	DAVENPORT	IOWA	34	142	
244	COLUMBUS	OHIO	37	335		304	CLINTON	IOWA	34	140	
245	ZANESVILLE	OHIO	37	360		305	HAGERSTOWN	MD	34	175	
246	CANTON	OHIO	37	331		306	CUMBERLAND	MD	34	174	
247	ASHEVILLE	NC	37	316		307	AURORA	ILL	34	94	
248	ST. LOUIS	MO	37	245		308	ELMIRA CITY	IOWA	34	146	
249	WHEELING	WV	37	462		309	ELMIRA	ILL	33	104	
250	EUGENE	ORE	37	367		310	TOPEKA	IOWA	33	148	
251	ALLIANCE	OHIO	37	329		311	TOPEKA	KAN	33	154	
252	VANCOUVER	WASH	37	454		312	KANKAKEE	ILL	33	109	
253	TULSA	OKLA	37	366		313	MOLINE	ILL	33	111	
254	BARBERTON	OHIO	37	330		314	BATTLE CREEK	MICH	33	207	
255	AKRON	OHIO	37	328		315	CHESTER	PENN	33	274	
256	WARREN	OHIO	37	358		316	FORT WORTH	TEX	33	222	
257	AMSTERDAM	NY	37	289		317	CAMDEN	NJ	33	261	
258	NEW CASTLE	PENN	37	383		318	BELOIT	WIS	33	464	
259	CONCORD	NH	37	254		319	SANDUSKY	OHIO	33	353	
260	MASSILLON	OHIO	37	347		320	TACOMA	WASH	33	453	
261	ALTIQUIPPA	PENN	37	370		321	NORMAN	OKLA	33	364	
262	SYRACUSE	NY	36	309		322	ELMIRA	NY	33	293	
263	BREMERTON	WASH	36	449		323	BELLINGHAM	WASH	33	448	
264	LIMA	OHIO	36	343		324	PHILADELPHIA	PENN	33	386	
265	NEW KENSINGTON	PENN	36	384		325	EVERETT	WASH	32	450	
266	BINGHAMTON	NY	36	291		326	LAKEWOOD	OHIO	32	342	
267	MCKEESPORT	PENN	36	382		327	BUFFALO	NY	32	292	
268	HARRISBURG	PENN	36	377		328	LACKAWANNA	NY	32	298	
269	PITTSBURGH	PENN	36	387		329	MACO	TEX	32	432	
270	WILKINSBURG	PENN	36	393		330	ERIE	PENN	32	376	
271	SPRINGFIELD	ILL	36	117		331	EUCLID	OHIO	32	340	
272	BLOOMINGTON	ILL	36	97		332	EAU CLAIRE	WIS	32	465	
273	DANVILLE	ILL	36	101		333	BURLINGTON	VT	32	437	
274	CHAMPAIGN	ILL	36	98		334	CLEVELAND HEIGHTS	OHIO	32	334	
275	BURLINGTON	IOWA	36	138		335	CLEVELAND	OHIO	32	333	
276	KANSAS CITY	KAN	35	152		336	SHAKER HEIGHTS	OHIO	32	354	
277	SOUTH BEND	IND	35	136		337	EAST CLEVELAND	OHIO	32	338	
278	KALAMAZOO	MICH	35	217		338	PARMA	OHIO	32	351	
279	QUINCY	ILL	35	114		339	HAMMOND	IND	32	126	
280	PEORIA	ILL	35	113		340	GARY	IND	32	125	
281	MISHAWAKA	IND	35	132		341	OAK PARK	ILL	32	112	
282	MICHIGAN CITY	IND	35	131		342	MAYWOOD	ILL	32	110	
283	INDEPENDENCE	MO	35	240		343	EAST CHICAGO	IND	32	121	
284	ELKHART	IND	35	122		344	DURDUQUE	IOWA	32	144	
285	DAYTON	OHIO	35	337		345	JACKSON	MICH	32	216	
286	AUSTIN	TEX	35	416		346	EVANSTON	ILL	32	105	
287	ITHACA	NY	35	295		347	BERKYN	ILL	32	96	
288	KANSAS CITY	MO	35	243		348	CICERO	ILL	32	100	
289	ST. JOSEPH	MO	35	244		349	CHICAGO	ILL	32	99	
290	ALBURN	NY	35	290		350	ROYAL OAK	MICH	31	223	
291	SCHENECTADY	NY	35	308		351	WATERLOO	IOWA	31	150	
292	TRCY	NY	35	310		352	LANSING	MICH	31	218	
293	LORAIN	OHIO	34	344		353	WYANDOTTE	MICH	31	225	
294	SHARON	PENN	34	390		354	HIGHLAND PARK	MICH	31	215	
295	TEMPLE	TEX	34	430		355	FERNDALE	MICH	31	211	
296	DALLAS	TEX	34	420		356	FORT DODGE	IOWA	31	145	
297	ELYRIA	OHIO	34	339		357	HAMTRACCK	MICH	31	214	
298	FORT WAYNE	IND	34	124		358	GRAND RAPIDS	MICH	31	213	
299	ROCK ISLAND	ILL	34	116		359	LINCLN PARK	MICH	31	219	

(AVERAGE PRECIPITATION CONT.)					(16)									
RANK	CITY	STATE	AVERAGE PRECIP.	PAGE	RANK	CITY	STATE	AVERAGE PRECIP.	PAGE	RANK	CITY	STATE	AVERAGE PRECIP.	PAGE
360	DEARBORN	MICH	31	209	420	RIVERSIDE	CAL	19	36	420	RIVERSIDE	CAL	19	36
361	WAUKEGAN	ILL	31	118	421	REDWOOD CITY	CAL	19	34	421	REDWOOD CITY	CAL	19	34
362	ANN ARBOR	MICH	31	206	422	PASADENA	CAL	19	31	422	PASADENA	CAL	19	31
363	DETROIT	MICH	31	210	423	PALO ALTO	CAL	19	30	423	PALO ALTO	CAL	19	30
364	WAUSAU	WIS	31	477	424	SAN ANGELO	TEX	19	428	424	SAN ANGELO	TEX	19	428
365	TOLEDO	OHIO	31	357	425	LAREDO	TEX	19	425	425	LAREDO	TEX	19	425
366	ALBANY	NY	31	288	426	GRAND FORKS	ND	19	357	426	GRAND FORKS	ND	19	357
367	SEATTLE	WASH	31	431	427	FARGO	ND	18	356	427	FARGO	ND	18	356
368	LOCKPORT	NY	31	529	428	PURDICK	TEX	18	426	428	PURDICK	TEX	18	426
369	ROCHESTER	NY	31	305	429	POWERS	CAL	18	352	429	POWERS	CAL	18	352
370	CHICAGO	ILL	31	325	430	RICHMOND	CAL	17	35	430	RICHMOND	CAL	17	35
371	SHERBOYAN	WY	30	475	431	OAKLAND	CAL	17	29	431	OAKLAND	CAL	17	29
372	RUCINE	WIS	30	474	432	ALAMEDA	CAL	17	15	432	ALAMEDA	CAL	17	15
373	MANITOWOC	WIS	30	471	433	BERKELEY	CAL	17	18	433	BERKELEY	CAL	17	18
374	KENDOSH	WIS	30	468	434	SANTA BARBARA	CAL	17	45	434	SANTA BARBARA	CAL	17	45
375	OKLAHOMA CITY	OKLA	30	365	435	SAN MATEO	CAL	17	43	435	SAN MATEO	CAL	17	43
376	MADISON	WIS	30	470	436	SAN LEANDRO	CAL	17	42	436	SAN LEANDRO	CAL	17	42
377	MARION	OHIO	30	346	437	OGDEN	UTAH	17	434	437	OGDEN	UTAH	17	434
378	DES MOINES	IOWA	30	143	438	RAPID CITY	SD	17	406	438	RAPID CITY	SD	17	406
379	CEDAR RAPIDS	IOWA	30	139	439	CHEYENNE	WY	16	480	439	CHEYENNE	WY	16	480
380	KICHITA	KAN	30	155	440	VALLEJO	CAL	16	49	440	VALLEJO	CAL	16	49
381	MASON CITY	IOWA	30	147	441	SACRAMENTO	CAL	16	37	441	SACRAMENTO	CAL	16	37
382	MINONA	MINN	30	231	442	SAN BERNARDINO	CAL	16	38	442	SAN BERNARDINO	CAL	16	38
383	SAGINAW	MICH	29	224	443	LOS ANGELES	CAL	14	27	443	LOS ANGELES	CAL	14	27
384	PONTIAC	MICH	29	221	444	SANTA MONICA	CAL	14	46	444	SANTA MONICA	CAL	14	46
385	PORT HURON	MICH	29	222	445	DENVER	COLOR	14	51	445	DENVER	COLOR	14	51
386	MUSKEGON	MICH	29	220	446	COLORADO SPRINGS	COLOR	14	50	446	COLORADO SPRINGS	COLOR	14	50
387	FLINT	MICH	29	212	447	GREAT FALLS	MONT	14	250	447	GREAT FALLS	MONT	14	250
388	BAY CITY	MICH	29	208	448	SANTA FE	NM	14	287	448	SANTA FE	NM	14	287
389	BROWNVILLE	TEX	29	418	449	SALT LAKE CITY	UTAH	14	436	449	SALT LAKE CITY	UTAH	14	436
390	FOND DU LAC	WIS	29	466	450	SPOKANE	WASH	14	452	450	SPOKANE	WASH	14	452
391	APPLETON	WIS	29	463	451	PROVO	UTAH	14	435	451	PROVO	UTAH	14	435
392	OSHKOSH	WIS	29	473	452	SANTA ANA	CAL	13	44	452	SANTA ANA	CAL	13	44
393	ENID	OKLA	29	361	453	BURBANK	CAL	13	20	453	BURBANK	CAL	13	20
394	LA CROSSE	WIS	28	469	454	GLENDALE	CAL	13	23	454	GLENDALE	CAL	13	23
395	CORPUS CHRISTI	TEX	28	419	455	BILLINGS	MONT	13	248	455	BILLINGS	MONT	13	248
396	ROCHESTER	MINN	28	228	456	BUTTE	MONT	12	249	456	BUTTE	MONT	12	249
397	JEFFERSON CITY	MO	27	479	457	INGLEWOOD	CAL	12	25	457	INGLEWOOD	CAL	12	25
398	WEST ELLIS	WIS	27	479	458	HUNTINGTON PARK	CAL	12	24	458	HUNTINGTON PARK	CAL	12	24
399	NIAGARA FALLS	NY	27	304	459	COMPTON	CAL	12	21	459	COMPTON	CAL	12	21
400	MILWAUKEE	WIS	27	472	460	BEVERLY HILLS	CAL	12	19	460	BEVERLY HILLS	CAL	12	19
401	HAUWAUKEE	WIS	27	478	461	ALHAMBRA	CAL	12	16	461	ALHAMBRA	CAL	12	16
402	SAN ANTONIO	TEX	27	429	462	SOUTH GATE	CAL	12	47	462	SOUTH GATE	CAL	12	47
403	WICHITA FALLS	TEX	26	433	463	ROSMELL	NM	12	286	463	ROSMELL	NM	12	286
404	SUPERIOR	WIS	26	476	464	POCATELLO	ID	12	92	464	POCATELLO	ID	12	92
405	GREEN BAY	WIS	26	467	465	LYNWOOD	CAL	12	28	465	LYNWOOD	CAL	12	28
406	DULUTH	MINN	26	226	466	LONG BEACH	CAL	12	26	466	LONG BEACH	CAL	12	26
407	LINCOLN	NEB	25	231	467	SAN JOSE	CAL	12	41	467	SAN JOSE	CAL	12	41
408	OMAHA	NEB	25	232	468	REDONDO BEACH	CAL	12	33	468	REDONDO BEACH	CAL	12	33
409	ST. LOUIS	MO	25	461	469	BOISE	ID	11	51	469	BOISE	ID	11	51
410	ST. LOUIS BLUFFS	MO	25	461	470	PUEBLO	COLOR	11	52	470	PUEBLO	COLOR	11	52
411	ST. LOUIS FALLS	MO	25	461	471	SAN DIEGO	CAL	10	39	471	SAN DIEGO	CAL	10	39
412	MINNEAPOLIS	MINN	24	169	472	TUCSON	ARIZ	10	9	472	TUCSON	ARIZ	10	9
413	ST. CLOUD	MINN	24	227	473	FRESNO	CAL	9	22	473	FRESNO	CAL	9	22
414	ST. PAUL	MINN	24	230	474	ALBUQUERQUE	NM	8	265	474	ALBUQUERQUE	NM	8	265
415	HUTCHINSON	KAN	24	151	475	YAKIMA	WASH	7	455	475	YAKIMA	WASH	7	455
416	SALINA	KAN	23	153	476	YAKIMA	WASH	7	455	476	YAKIMA	WASH	7	455
417	APTLENE	TEX	22	414	477	EL PASO	TEX	7	421	477	EL PASO	TEX	7	421
418	AMARILLO	TEX	21	415	478	BAKERSFIELD	CAL	6	17	478	BAKERSFIELD	CAL	6	17
419	SAN FRANCISCO	CAL	20	40	479	RENO	NEV	6	253	479	RENO	NEV	6	253
					480	STOCKTON	CAL	1	48	480	STOCKTON	CAL	1	48

CITIES RANKED BY AVERAGE JANUARY TEMPERATURE (17)									
RANK	CITY	STATE	JAN. TEMP.	PAGE	RANK	CITY	STATE	JAN. TEMP.	PAGE
1	MIAMI BEACH	FLA	70	74	60	TUCSON	ARIZ	49	9
2	KEY WEST	FLA	70	71	61	PHOENIX	ARIZ	49	8
3	MIAMI	FLA	68	73	62	MONTGOMERY	ALA	49	6
4	FORT LAUDERDALE	FLA	68	68	63	MONROE	LA	48	167
5	WEST PALM BEACH	FLA	67	81	64	AUGUSTA	GA	48	85
6	ST. PETERSBURG	FLA	63	78	65	SANTA ANA	CAL	48	44
7	LAKELAND	FLA	62	72	66	JACKSON	MISS	48	235
8	TAMPA	FLA	61	80	67	COLUMBIA	SC	47	403
9	ORLANDO	FLA	61	75	68	MERIDIAN	NC	47	237
10	BROWNSVILLE	TEX	60	418	69	WILMINGTON	NC	47	324
11	DAYTONA BEACH	FLA	59	67	70	SAN MATEO	CAL	47	43
12	GAINESVILLE	FLA	57	69	71	SAN LEANDRO	CAL	47	42
13	JACKSONVILLE	FLA	57	70	72	COLUMBUS	GA	47	86
14	LAREDO	TEX	57	425	73	SHREVEPORT	LA	47	169
15	CORPUS CHRISTI	TEX	55	419	74	RICHMOND	CAL	47	35
16	SANTA MONICA	CAL	55	46	75	OAKLAND	CAL	47	29
17	LOS ANGELES	CAL	55	27	76	BERKELEY	CAL	47	18
18	NEW ORLEANS	LA	55	168	77	ALAMEDA	CAL	47	15
19	LONG BEACH	CAL	54	26	78	SAN ANGELO	TEX	47	428
20	SAN DIEGO	CAL	54	39	79	WACO	TEX	47	432
21	REDONDO BEACH	CAL	54	33	80	TEMPLE	TEX	47	430
22	PENSACOLA	FLA	54	77	81	BAKERSFIELD	CAL	46	17
23	GALVESTON	TEX	54	423	82	SACRAMENTO	CAL	45	37
24	BEAUMONT	TEX	54	417	83	REDWOOD CITY	CAL	45	34
25	HOUSTON	TEX	53	424	84	PALO ALTO	CAL	45	30
26	PANAMA CITY	FLA	53	76	85	LA GRANGE	GA	45	87
27	TALLAHASSEE	FLA	53	47	86	STOCKTON	CAL	45	48
28	SANTA BARBARA	CAL	53	45	87	BIRMINGHAM	ALA	45	3
29	SANTA BARBARA	CAL	53	47	88	BESSEMER	ALA	45	4
30	LYNNWOOD	CAL	53	28	89	TUSCALOOSA	ALA	45	2
31	INGLEWOOD	CAL	53	25	90	ANNISTON	ALA	45	7
32	HUNTINGTON PARK	CAL	53	24	91	FLYER	TEX	45	1
33	COMPTON	CAL	53	21	92	DALLAS	TEX	45	431
34	BEVERLY HILLS	CAL	53	19	93	FORT WORTH	TEX	45	420
35	ALHAMBRA	CAL	53	16	94	GREENVILLE	MISS	45	233
36	LAFAYETTE	LA	53	165	95	VALLETTVILLE	NC	44	319
37	BILOXI	MISS	52	232	96	FALELE	CAL	44	49
38	BURBANK	CAL	52	20	97	ATLANTA	GA	44	84
39	GLENDALE	CAL	52	23	98	ATHENS	GA	44	83
40	PASADENA	CAL	52	31	99	FRESNO	CAL	44	22
41	SAVANNAH	GA	52	90	100	PINE BLUFF	ARK	43	14
42	BATON ROUGE	LA	52	164	101	HOT SPRINGS	ARK	43	11
43	MOBILE	ALA	52	5	102	GADSDEN	ALA	43	4
44	LAKE CHARLES	LA	52	166	103	SPARTANBURG	SC	43	405
45	PORT ARTHUR	TEX	52	427	104	GREENVILLE	SC	43	404
46	CHARLESTON	SC	51	402	105	ABILENE	TEX	43	414
47	ALBANY	GA	51	82	106	EL PASO	TEX	43	421
48	ALEXANDRIA	LA	51	163	107	CHARLOTTE	NC	42	317
49	SAN BERNARDINO	CAL	51	38	108	ROME	GA	42	89
50	RIVERSIDE	CAL	51	36	109	NORTH LITTLE ROCK	ARK	41	13
51	SAN FRANCISCO	CAL	50	40	110	LITTLE ROCK	ARK	41	12
52	SAN ANTONIO	TEX	50	429	111	CHATTANOOGA	TENN	41	408
53	HATTIESBURG	MISS	50	234	112	MEMPHIS	TENN	41	412
54	LAUREL	MISS	50	236	113	DURHAM	NC	41	318
55	VICKSBURG	MISS	49	238	114	PORTLAND	ORE	41	368
56	JUSTICE	TEX	49	416	115	RALEIGH	NC	41	322
57	SAN JOSE	CAL	49	31	116	BELLINGHAM	WASH	41	448
58	POWONA	CAL	49	31	117	NORFOLK	VA	41	443
59	MACON	GA	49	88	118	NICHITA FALLS	TEX	40	433
					119	DANVILLE	VA	40	440

120	SEATTLE	40	451	180	UNIVERSITY CITY	MO	32	247
121	JACKSON	40	409	181	READING	PENN	32	388
122	KNOXVILLE	40	411	182	TRENTON	NJ	32	261
123	ROCKY MOUNT	40	323	183	HOBOKEN	NJ	32	287
124	LAHTON	40	362	184	UNION CITY	NJ	32	282
125	FORT SMITH	40	10	185	CHESTER	PENN	32	374
126	WINSTON-SALEM	39	325	186	WEST NEW YORK	NJ	32	283
127	ASHEVILLE	39	316	187	NEW YORK CITY	NY	32	303
128	NASHVILLE	39	413	188	JERSEY CITY	NJ	32	269
129	HIGH POINT	39	321	189	MOUNT VERNON	NY	32	300
130	GREENSBORO	39	320	190	YONKERS	NY	32	315
131	ROSWELL	39	286	191	CLARKSBURG	WV	32	457
132	PORTSMOUTH	39	445	192	FAIRMONT	WV	32	458
133	NEWPORT NEWS	39	442	193	RELEVILLE	ILL	32	95
134	PETERSBURG	39	444	194	LEXINGTON	KY	32	158
135	BREWERTON	38	449	195	WICHITA	KAN	32	155
136	RICHMOND	38	446	196	CUMBERLAND	MD	31	174
137	EVERETT	38	450	197	COVINGTON	KY	31	157
138	HUNTINGTON	38	459	198	NEWPORT	KY	31	160
139	VANCOUVER	38	454	199	HAGERSTOWN	MD	31	175
140	LUBBOCK	38	426	200	SALINA	KAN	31	153
141	NORMAN	38	364	201	WASHINGTON	PENN	31	391
142	MUSKOGEE	38	363	202	RENO	NEV	31	253
143	SALEM	38	369	203	NORRISTOWN	PENN	31	385
144	EUGENE	38	367	204	HARRISBURG	PENN	31	377
145	TULSA	37	366	205	HAPLITON	OHIO	31	341
146	OKLAHOMA CITY	37	365	206	NEWARK	NJ	31	273
147	ROANOKE	37	447	207	IRVINGTON	NJ	31	268
148	TACOMA	37	453	208	KEARNY	NJ	31	270
149	LYNCHBURG	37	441	209	BAYONNE	NJ	31	258
150	CHARLOTTEVILLE	36	439	210	MIDDLETOWN	OHIO	31	348
151	ALEXANDRIA	36	438	211	GARFIELD	NJ	30	265
152	CHARLESTON	36	456	212	PASSAIC	NJ	30	277
153	ENID	36	361	213	INDEPENDENCE	MO	30	240
154	PAUCAH	36	162	214	HACKENSACK	NJ	30	266
155	DISTRICT OF COLUMBIA	36	176	215	KANSAS CITY	MO	30	243
156	BALTIMORE	36	173	216	PLAINFIELD	NJ	30	280
157	CHICAGO	35	151	217	PERTH AMBOY	NJ	30	279
158	ASHLAND	35	151	218	PATTERSON	NJ	30	278
159	ATLANTIC CITY	35	257	219	ELIZABETH	NJ	30	264
160	AMARILLO	35	415	220	CLIFTON	NJ	30	262
161	CINCINNATI	34	332	221	YORK	PENN	30	395
162	JOHNSON CITY	34	410	222	LINDEN	NJ	30	271
163	PORTSMOUTH	34	352	223	NEW ROCHELLE	NY	30	302
164	NORWOOD	34	350	224	NEW BRUNSWICK	NJ	30	274
165	JOPLIN	34	242	225	WHEELING	WY	30	462
166	OMENSBORO	34	161	226	JOHNSTON	PENN	30	380
167	LOUISVILLE	34	159	227	JOHNSTON	PENN	30	373
168	NEW ALBANY	34	134	228	BETHLEHEM	KAN	30	152
169	EVANSVILLE	34	123	229	KANSAS CITY	IND	30	120
170	PARKERSBURG	34	461	230	BLOOMINGTON	MASS	29	199
171	GRANITE CITY	33	107	231	REVERE	MASS	29	178
172	WILMINGTON	33	65	232	CAMBRIDGE	MASS	29	179
173	ALTON	33	93	233	BROCKTON	MASS	29	177
174	EAST ST. LOUIS	33	103	234	BOSTON	MASS	29	194
175	ST. LOUIS	33	245	235	NEW BEDFORD	MASS	29	201
176	ALBUQUERQUE	32	285	236	SOMERVILLE	MASS	29	239
177	PHILADELPHIA	32	386	237	COLUMBIA	MO	29	239
178	SPRINGFIELD	32	246	238	CHELSEA	MASS	29	180
179	CAMDEN	32	261	239	JEFFERSON CITY	MO	29	241

240	NEWTON	MASS	29	195	300	TERRE HAUTE	IND	28	137
241	FALL RIVER	MASS	29	183	301	MUNCIE	IND	28	133
242	EVERETT	MASS	29	182	302	DECATUR	ILL	28	102
243	TOPEKA	KAN	29	154	303	INDIANAPOLIS	IND	28	127
244	BRIDGEPORT	CONN	29	53	304	ANDERSON	IND	28	119
245	PUERLO	COLORADO	29	52	305	QUINCY	ILL	28	114
246	NEW LONDON	CONN	29	60	306	SPRINGFIELD	ILL	27	117
247	NEW HAVEN	CONN	29	59	307	KOKOMO	IND	27	128
248	WALTHAM	MASS	29	204	308	MARION	IND	27	130
249	LYNN	MASS	29	190	309	BEVERLY	MASS	27	176
250	MELROSE	MASS	29	193	310	BOISE	ID	27	91
251	MEDFORD	MASS	29	192	311	DANVILLE	ILL	27	101
252	MALDEN	MASS	29	191	312	SPRINGFIELD	MASS	27	202
253	WILKINSBURG	PENN	29	393	313	MIDDLETOWN	CONN	27	57
254	STUEBENVILLE	OHIO	25	356	314	HARTFORD	CONN	27	55
255	VALLEY STREAM	NY	29	312	315	ST. JOSEPH	MO	27	244
256	SANTA FE	NM	29	287	316	SALEM	MASS	27	200
257	MORGANTOWN	WV	29	460	317	NEW BRITAIN	CONN	27	58
258	PITTSBURGH	PENN	29	387	318	RICHMOND	IND	27	132
259	MOONSOCKET	RI	25	401	319	HAVERHILL	MASS	27	186
260	COLUMBUS	OHIO	25	335	320	TAUNTON	MASS	27	103
261	DAYTON	OHIO	29	337	321	LITCHFIELD	CONN	27	143
262	ALBUQUERQUE	PENN	29	370	322	CUYAHOGA FALLS	OHIO	27	326
263	PAWTUCKET	RI	29	398	323	MARTIN	OHIO	27	366
264	NEW KENSINGTON	PENN	29	384	324	KINGSTON	NY	27	297
265	MCKEESPORT	PENN	29	382	325	ALLIANCE	OHIO	27	329
266	HEMPSTEAD	PENN	29	381	326	AKRON	OHIO	27	328
267	LEBANON	PENN	29	381	327	BARBERTON	OHIO	27	330
268	SPRINGFIELD	OHIO	29	355	328	MASSILLON	OHIO	27	347
269	SHREVEPORT	PENN	28	300	329	CANTON	OHIO	27	331
270	SHREVEPORT	PENN	28	371	330	YOUNGSTOWN	OHIO	27	359
271	SHAKER HEIGHTS	OHIO	28	354	331	EASTON	PENN	27	375
272	SANDUSKY	OHIO	28	353	332	WILKES-BARRE	PENN	27	392
273	ZANESVILLE	OHIO	28	360	333	ALTONA	PENN	27	372
274	NEWARK	OHIO	28	349	334	WHITE PLAINS	NY	27	314
275	NEWPORT	RI	28	397	335	WARREN	OHIO	27	358
276	PROVIDENCE	RI	28	399	336	TOLEDO	OHIO	26	357
277	NUTLEY	NJ	28	275	337	PROVO	UTAH	26	435
278	ORANGE	NJ	28	276	338	OGDEN	UTAH	26	434
279	CRANSTON	RI	28	396	339	SCRANTON	PENN	26	389
280	PARMA	OHIO	28	351	340	ELYRIA	OHIO	26	339
281	MONTCLAIR	NJ	28	272	341	SALT LAKE CITY	UTAH	26	436
282	LAKEWOOD	OHIO	28	342	342	LORAIN	OHIO	26	344
283	EUCLED	OHIO	28	340	343	POUGHKEEPSIE	NY	26	305
284	EAST CLEVELAND	OHIO	28	338	344	MANSFIELD	OHIO	26	345
285	WARWICK	RI	28	400	345	YAKIMA	WASH	26	455
286	NEW CASTLE	PENN	28	383	346	HIGHLAND PARK	MICH	26	215
287	CLEVELAND HEIGHTS	OHIO	28	334	347	FERNDALE	MICH	26	211
288	CLEVELAND	OHIO	28	333	348	WYANDOTTE	MICH	26	225
289	WILLIAMSPORT	PENN	28	394	349	DETROIT	MICH	26	210
290	WEST ORANGE	NJ	28	284	350	DEARBORN	MICH	26	209
291	GLUCESTER	MASS	28	185	351	ROCKFORD	CONN	26	61
292	WATERBURY	CONN	28	64	352	STAMFORD	CONN	26	62
293	DENVER	COLORADO	28	51	353	FAIRMONT	MICH	26	264
294	COLORADO SPRINGS	COLORADO	28	50	354	EVANSTON	ILL	26	263
295	BELLEVILLE	NJ	28	279	355	CHAMPAIGN	ILL	26	98
296	BLOOMFIELD	OHIO	28	260	356	ROYAL OAK	MICH	26	223
297	MERIDEN	CONN	28	56	357	BLOOMINGTON	ILL	26	97
298	BRISTOL	CONN	28	54	358	LINCOLN PARK	MICH	26	219
299	EAST ORANGE	NJ	28	263	359	FORT WAYNE	IND	26	124

360	LACKAWANNA	NY	25	298
361	LAFAYETTE	IND	25	129
362	LAFAYETTE	MASS	25	198
363	KANAWAEE	ILL	25	109
364	KEOSAU	ILL	25	113
365	NIAGARA FALLS	NY	25	304
366	JAMESTOWN	NY	25	296
367	BUFFALO	NY	25	292
368	BINGHAMTON	NY	25	291
369	CHICOPEE	MASS	25	181
370	SYRACUSE	NY	25	309
371	AUBURN	NY	25	290
372	WORCESTER	MASS	25	205
373	LINCOLN	NEB	25	251
374	LOWELL	MASS	25	189
375	HOLYOKE	MASS	25	187
376	GRAND RAPIDS	MICH	25	213
377	CHEYENNE	WY	25	480
378	ERIE	PENN	25	376
379	HAZELTON	PENN	24	378
380	SPOKANE	WASH	24	452
381	OTTUMWA	IOWA	24	148
382	MANCHESTER	NH	24	255
383	NASHUA	NH	24	256
384	KALAMAZOO	MICH	24	217
385	JACKSON	MICH	24	216
386	LAWRENCE	MASS	24	188
387	DAVENPORT	IOWA	24	142
388	SOUTH BEND	IND	24	136
389	ROCHESTER	NY	24	306
390	EVANSTON	ILL	24	105
391	BERWYN	ILL	24	96
392	CICERO	ILL	24	100
393	CHICAGO	ILL	24	99
394	BURLINGTON	IOWA	24	138
395	FITCHBURG	MASS	24	184
396	OKLAHOMA	ILL	24	112
397	OKLAHOMA	ILL	24	112
398	MUSKOGEE	MICH	24	220
399	EAST CHICAGO	IND	24	121
400	NEWBURGH	NY	24	301
401	HAMMOND	IND	24	126
402	LOCKPORT	NY	24	299
403	GARY	IND	24	125
404	ELKHART	IND	24	122
405	MISHAWAKA	IND	24	132
406	MICHIGAN CITY	IND	24	131
407	JOLIET	ILL	23	108
408	MOLINE	ILL	23	111
409	ROCK ISLAND	ILL	23	116
410	NORTHAMPTON	MASS	23	196
411	BATTLE CREEK	MICH	23	207
412	CLINTON	IOWA	23	140
413	COUNCIL BLUFFS	IOWA	23	141
414	ITHACA	NY	23	295
415	AURORA	ILL	23	94
416	PORT HURON	MICH	23	222
417	PONTIAC	MICH	23	221
418	TORRINGTON	CONN	23	63
419	LANSING	MICH	23	218

420	OMAHA	NEB	23	252
421	BAY CITY	MICH	23	208
422	ALBANY	NY	22	288
423	FLINT	MICH	22	212
424	DES MOINES	IOWA	22	143
425	GREAT FALLS	MONT	22	250
426	POCATELLO	ID	22	92
427	SAGINAW	MICH	22	224
428	ELGIN	ILL	22	104
429	TROY	NY	22	310
430	BILLINGS	MONT	22	248
431	ANN ARBOR	MICH	22	206
432	GALESBURG	ILL	22	106
433	WAUKESHA	ILL	22	118
434	RACINE	WIS	22	474
435	KENOSHA	WIS	22	468
436	WEST ELLIS	WIS	21	479
437	WAUWATOSA	WIS	21	478
438	RAPID CITY	SD	21	406
439	MILWAUKEE	WIS	21	472
440	PITTSFIELD	MASS	21	197
441	SCHENECTADY	NY	21	308
442	AMSTERDAM	NY	21	289
443	WATERTOWN	NY	20	313
444	CEDAR RAPIDS	IOWA	20	139
445	ROME	NY	20	307
446	CONCORD	NH	20	254
447	PORTLAND	ME	20	172
448	IOWA CITY	IOWA	20	146
449	SHEBOYGAN	WIS	20	475
450	BELOIT	WIS	20	464
451	MANITOWOC	WIS	19	471
452	WADSWORTH	WIS	19	170
453	LEWISTON	WIS	19	171
454	STROUTS	WIS	19	143
455	TOBIQUE	IOWA	19	144
456	WATERLOO	IOWA	19	150
457	ROCKFORD	ILL	18	115
458	FORT DODGE	IOWA	17	145
459	BANGOR	ME	17	170
460	UTICA	NY	17	311
461	OSHKOSH	WIS	17	473
462	FOND DU LAC	WIS	17	466
463	BURLINGTON	VT	17	437
464	GREEN BAY	WIS	16	467
465	APPLETON	WIS	16	463
466	LA CROSSE	WIS	15	469
467	MASON CITY	IOWA	15	147
468	WINONA	MINN	15	231
469	ST. PAUL	MINN	14	230
470	BUTTE	MONT	14	249
471	MINNEAPOLIS	MINN	14	227
472	ROCHESTER	MINN	14	228
473	SIOUX FALLS	SD	14	407
474	EAU CLAIRE	WIS	13	465
475	HAUSAU	WIS	11	477
476	SUPERIOR	WIS	10	476
477	ST. CLOUD	MINN	10	229
478	DULUTH	MINN	10	226
479	FARGO	ND	7	327
480	GRAND FORKS	ND	3	327

CITIES RANKED BY AVERAGE JULY TEMPERATURE				CITIES RANKED BY AVERAGE JULY TEMP.			
RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE
1	PHOENIX	ARIZ	90	8	LAKELAND	FLA	81
2	MONTGOMERY	ALA	89	6	JACKSONVILLE	FLA	72
3	OTTUMWA	IONA	87	140	GAINESVILLE	FLA	70
4	LAREDO	TEX	87	425	SAVANNAH	FLA	69
5	SALINA	KAN	86	153	DAYTONA BEACH	FLA	68
6	DULSON	ARK	86	4	TUSCALOOSA	ALA	90
7	DALLAS	TEX	86	420	GALESBURG	ILL	7
8	FORT WORTH	TEX	85	422	PADUCAH	KY	106
9	WACO	TEX	85	432	PORT ARTHUR	TEX	162
10	TEMPLE	TEX	84	430	MEMPHIS	TENN	81
11	SAN ANTONIO	TEX	84	429	CHESTER	PENN	412
12	AUSTIN	TEX	84	416	PHILADELPHIA	PENN	374
13	BAKERSFIELD	CAL	84	17	CAMDEN	NJ	386
14	KEY WEST	FLA	83	71	LAUREL	MISS	261
15	WICHITA FALLS	TEX	83	433	VICKSBURG	MISS	238
16	ABILENE	TEX	83	414	CHARLESTON	SC	81
17	TYLER	TEX	83	431	EL PASO	SC	402
18	BEAUMONT	TEX	83	417	BILOXI	MISS	421
19	GALVESTON	TEX	83	423	BATON ROUGE	LA	232
20	PORTSMOUTH	VA	83	445	MERIDIAN	LA	164
21	HOUSTON	TEX	83	424	UNIVERSITY CITY	MO	237
22	BROWNSVILLE	TEX	83	418	INDEPENDENCE	MO	247
23	NEWPORT NEWS	VA	83	442	KANSAS CITY	MO	240
24	HUTCHINSON	KAN	83	151	WILMINGTON	NC	243
25	SHREVEPORT	LA	83	169	ROCKY MOUNT	NC	324
26	NEW ORLEANS	LA	83	168	ST. LOUIS	MO	323
27	ALEXANDRIA	LA	83	163	ST. JOSEPH	MO	245
28	GREENVILLE	MISS	82	233	NASHVILLE	TENN	244
29	JACKSON	MISS	82	235	GRANITE CITY	ILL	413
30	FATTIESBURG	MISS	82	234	MOBILE	ALA	107
31	TULSA	OKLA	82	366	GACSDEN	ALA	80
32	MUSKOGEE	OKLA	82	363	ALTON	ILL	5
33	LAKE CHARLES	LA	82	166	EAST ST. LOUIS	ILL	93
34	LAFAYETTE	LA	82	165	DAYTONA BEACH	FLA	103
35	ENID	OKLA	82	361	WICHITA	KAN	67
36	MONROE	LA	82	167	TOPEKA	KAN	135
37	LAWTON	OKLA	82	362	ATHENS	KAN	134
38	OKLAHOMA CITY	OKLA	82	365	ROMA	KAN	153
39	NORMAN	OKLA	82	364	CHICAGO	ILL	152
40	NORMAN CHRISTI	TEX	82	418	COLUMBUS	GA	89
41	SANDWICH	GA	82	428	LA GRANGE	GA	86
42	MACON	GA	82	428	ATLANTA	GA	87
43	ALBANY	GA	82	82	TERRE HAUTE	IND	84
44	WEST PALM BEACH	FLA	82	81	BELEVILLE	ILL	137
45	ST. PETERSBURG	FLA	82	78	COLORADO SPRINGS	COLO	95
46	ORLANDO	FLA	82	75	BIRMINGHAM	ALA	50
47	MIAMI BEACH	FLA	82	74	BESSEMER	ALA	79
48	PINE BLUFF	ARK	82	14	ANNISTON	ALA	2
49	FRESNO	CAL	82	22	ROSNELL	NM	79
50	HOT SPRINGS	ARK	82	11	FAYETTEVILLE	NC	286
51	FORT SMITH	ARK	82	10	JACKSON	TENN	1
52	NORTH LITTLE ROCK	ARK	81	13	LUBBOCK	TEX	319
53	LITTLE ROCK	ARK	81	12	ALBUQUERQUE	TEX	426
54	PENSACOLA	FLA	81	77	LINCOLN	NM	409
55	PANAMA CITY	FLA	81	76	SPRINGFIELD	NEB	285
56	TAMPA	FLA	81	80	DANVILLE	OHIO	251
57	TALLAHASSEE	FLA	81	79	PETERSBURG	VA	355
58	AUGUSTA	GA	81	85	OMAHA	NEB	440
59	MIAMI	FLA	81	73	SPARTANBURG	SC	444
							252
							78
							405

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RANK	CITY	STATE	JULY TEMP.	PAGE	RANK	CITY	STATE	JULY TEMP.	PAGE				
120	GREENVILLE	SC	78	404	180	SIoux CITY	IOWA	76	149				
121	CINCINNATI	OHIO	78	352	181	SAN BERNARDINO	CAL	76	39				
122	CHATTANOOGA	TENN	78	408	182	SACRAMENTO	CAL	75	37				
123	CHARLOTTE	NC	78	317	183	RIVERSIDE	CAL	75	36				
124	KNOXVILLE	TENN	78	411	184	IOWA CITY	IOWA	75	146				
125	DURHAM	NC	78	318	185	CLINTON	IOWA	75	140				
126	RALEIGH	NC	78	322	186	CEDAR RAPIDS	IOWA	75	139				
127	JEFFERSON CITY	MO	78	241	187	COVINGTON	KY	75	157				
128	JOPLIN	MO	78	242	188	LEXINGTON	KY	75	158				
129	NORWOOD	OHIO	78	350	189	WILMINGTON	DEL	75	65				
130	LAFAYETTE	IND	78	129	190	NEWMPT	KY	75	160				
131	EVANSVILLE	IND	78	123	191	DANVILLE	ILL	75	101				
132	QUINCY	ILL	78	114	192	CHAMPAIGN	ILL	75	98				
133	MERIDEN	CONN	78	56	193	FALL RIVER	MASS	75	183				
134	BRISTOL	CONN	78	54	194	ROCK ISLAND	ILL	75	116				
135	WATERBURY	CONN	78	64	195	KANKAKEE	ILL	75	109				
136	HAGERSTOWN	MD	78	175	196	PEORIA	ILL	75	113				
137	BALTIMORE	MD	78	173	197	MOLINE	ILL	75	111				
138	COUNCIL BLUFFS	IOWA	78	141	198	MUNCIE	IND	75	133				
139	DAVENPORT	IOWA	77	142	199	HARRISBURG	PENN	75	377				
140	LOUISVILLE	KY	77	159	200	KEARNY	NJ	75	270				
141	DISTRICT OF COLUMBIA		77	66	201	JERSEY CITY	NJ	75	269				
142	MIDDLETOWN	CONN	77	57	202	NORRISTOWN	PENN	75	385				
143	SANTA ANA	CAL	77	44	203	LINDEN	NJ	75	271				
144	DECATUR	ILL	77	102	204	CHARLESTON	NJ	75	456				
145	OWENSBORO	KY	77	161	205	IRVINGTON	NJ	75	268				
146	NEW ALBANY	IND	77	134	206	HOBOKEN	NJ	75	267				
147	WINSTON-SALEM	NC	77	325	207	ROANOKE	VA	75	447				
148	HIGH POINT	NC	77	321	208	BAYONNE	NJ	75	258				
149	JOHNSON CITY	TENN	77	410	209	BETHLEHEM	NJ	75	373				
150	COLUMBIA	MO	77	239	210	ELIZABETH	NJ	75	264				
151	WHITE PLAINS	NY	77	314	211	PARKERSBURG	WV	75	461				
152	SPRINGFIELD	MO	77	246	212	NEWARK	NJ	75	273				
153	GREENSBORO	NC	77	320	213	TRENTON	NJ	75	281				
154	MORGANTOWN	WV	77	460	214	WEST NEW YORK	NJ	75	283				
155	ZANESVILLE	OHIO	77	360	215	UNION CITY	NJ	75	282				
156	RICHMOND	VA	77	446	216	OGDEN	UTAH	75	434				
157	NORFOLK	VA	77	443	217	READING	PENN	75	388				
158	PORT HURON	MICH	77	222	218	DAYTON	OHIO	75	337				
159	ALEXANDRIA	VA	77	438	219	EASTON	PENN	74	375				
160	AMARILLO	TEX	77	415	220	YORK	PENN	74	395				
161	RACINE	WIS	77	474	221	COLUMBUS	OHIO	74	335				
162	KENOSHA	WIS	77	468	222	PLAINFIELD	NJ	74	280				
163	HAMILTON	OHIO	76	341	223	PATTERSON	NJ	74	278				
164	MOUNT VERNON	NY	76	300	224	PASSAIC	NJ	74	277				
165	HUNTINGTON	WV	76	459	225	LA CROSSE	WIS	74	469				
166	PORTSMOUTH	OHIO	76	352	226	SIoux FALLS	SD	74	407				
167	YONKERS	NY	76	315	227	GARFIELD	NJ	74	265				
168	SALT LAKE CITY	UTAH	76	436	228	WHEELING	WV	74	462				
169	MIDDLETOWN	OHIO	76	348	229	UTICA	NY	74	311				
170	CHARLOTTESVILLE	VA	76	439	230	CLIFTON	NJ	74	262				
171	LYNCHBURG	VA	76	441	231	ALLENSTOWN	PENN	74	371				
172	SPRINGFIELD	ILL	76	117	232	FAIRMONT	WV	74	458				
173	BLOOMINGTON	IND	76	120	233	LEBANON	PENN	74	381				
174	KOKOMO	IND	76	128	234	HACKENSACK	NJ	74	266				
175	INDIANAPOLIS	IND	76	127	235	NEW YORK CITY	NY	74	303				
176	BLOOMINGTON	ILL	76	97	236	ERIE	PENN	74	376				
177	ASHLAND	KY	76	156	237	STUEBENVILLE	OHIO	74	356				
178	DES MOINES	IOWA	76	143	238	LANCASTER	PENN	74	380				
179	BURLINGTON	IOWA	76	138	239	SANDUSKY	OHIO	74	353				

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240	MINNEAPOLIS	MINN	74	227
241	SALEM	MASS	74	200
242	OAK PARK	ILL	74	112
243	ST. PAUL	MINN	74	230
244	WINONA	MINN	74	231
245	WYWOOD	ILL	74	110
246	EAST CHICAGO	IND	74	121
247	ANDERSON	IND	74	119
248	HAMMOND	IND	74	126
249	GARY	IND	74	125
250	MARION	IND	74	130
251	CICERO	ILL	74	100
252	CHICAGO	ILL	74	99
253	BOISE	ID	74	91
254	BERNYS	ILL	74	96
255	EVANSTON	ILL	74	105
256	BEVERLY	MASS	74	176
257	CUMBERLAND	MD	74	174
258	WATERLOO	IOWA	74	150
259	PUEBLO	COLORADO	74	52
260	STOCKTON	CAL	74	48
261	FORT DODGE	IOWA	74	145
262	LENDALE	CAL	73	223
263	GRAND RAPIDS	MICH	73	213
264	DEARBORN	MICH	73	209
265	MASON CITY	IOWA	73	147
266	DUBUQUE	IOWA	73	144
267	SOUTH BEND	IND	73	136
268	BURBANK	CAL	73	228
269	BILLINGS	MONT	73	229
270	WATERFORD	MASS	73	257
271	WATERFORD	CONN	73	55
272	BELLEVILLE	NJ	73	259
273	BLCMFELIE	NJ	73	260
274	BATTLE CREEK	MICH	73	207
275	HIGHLAND PARK	MICH	73	215
276	EAST ORANGE	NJ	73	263
277	HAMTRAC	MICH	73	214
278	ELGIN	ILL	73	104
279	AURORA	ILL	73	94
280	LINGOLN PARK	MICH	73	219
281	JACKSON	MICH	73	216
282	ANN ARBOR	MICH	73	206
283	NEW BRITAIN	CONN	73	58
284	MISHAWAKA	IND	73	132
285	MONTCLAIR	NJ	73	272
286	MICHIGAN CITY	IND	73	131
287	FORT WAYNE	IND	73	124
288	NUTLEY	NJ	73	275
289	ORANGE	NJ	73	276
290	ELKHART	IND	73	122
291	SPRINGFIELD	MASS	73	202
292	WYANDOTTE	MICH	73	225
293	JOLIET	ILL	73	108
294	ROYAL OAK	MICH	73	223
295	HAVERHILL	MASS	73	186
296	RICHMOND	IND	73	135
297	WEST ORANGE	IND	73	284
298	FERNDALE	MICH	73	211
299	DETROIT	MICH	73	210
300	POMONA	CAL	73	32
301	JOHNSTOWN	PENN	73	379
302	WILLIAMSPORT	PENN	73	394
303	TOLEDO	OHIO	73	357
304	SHAKER HEIGHTS	OHIO	73	354
305	NEW ROCHELLE	NY	73	302
306	NEWARK	OHIO	73	349
307	NEUBURGH	NY	73	301
308	POUGHKEEPSIE	NY	73	305
309	PARMA	OHIO	73	351
310	CLARKSBURG	WV	73	457
311	SHARON	PENN	73	390
312	ALQUIPPA	PENN	73	370
313	ASHEVILLE	NC	73	316
314	MADISON	WIS	73	470
315	PANTUCKET	RI	73	398
316	BELOIT	WIS	73	464
317	MARTON	OHIO	73	401
318	MOONSOCKET	RI	73	334
319	CLEVELAND HEIGHTS	OHIO	73	333
320	CLEVELAND	OHIO	73	343
321	LINA	OHIO	73	342
322	LAKEWOOD	OHIO	73	340
323	EUCID	OHIO	73	338
324	EAST CLEVELAND	OHIO	73	336
325	PLATTSMOUTH	NEB	72	387
326	PITTSBURGH	PENN	72	389
327	SCRANTON	PENN	72	466
328	FORD DU LAC	LOUISIANA	72	364
329	LOPATIN	OHIO	72	336
330	CUYAHOGA FALLS	OHIO	72	384
331	NEW KENSTON	PENN	72	406
332	RAPID CITY	SD	72	330
333	BARBERTON	OHIO	72	331
334	CANTON	OHIO	72	465
335	EAU CLAIRE	WIS	72	347
336	MASSTILLON	OHIO	72	359
337	YOUNGSTOWN	OHIO	72	358
338	WARREN	OHIO	72	435
339	PROVO	UTAH	72	382
340	MCKEESPORT	PENN	72	391
341	WASHINGTON	PENN	72	473
342	CSHKOSH	WIS	72	383
343	NEW CASTLE	PENN	72	328
344	AKRON	OHIO	72	329
345	ALLIANCE	OHIO	72	393
346	WILKINSBURG	PENN	72	392
347	WILKES-BARRE	PENN	72	31
348	PASADENA	CAL	72	289
349	AMSTERDAM	NY	72	27
350	LOS ANGELES	CAL	72	199
351	REVERE	MASS	72	201
352	SOMERVILLE	MASS	72	115
353	ROCKFORD	ILL	72	279
354	PERTH AMBOY	NJ	72	274
355	NEW BRUNSWICK	NJ	72	204
356	WALTHAM	MASS	72	257
357	KINGSTON	NY	72	182
358	EVERETT	MASS	72	181
359	CHICOPEE	MASS	72	181

RANK				CITY				STATE				JULY TEMP. PAGE				STATE				JULY TEMP. PAGE							
RANK				CITY				STATE				JULY TEMP. (24)				CITY				RANK				CITY			
360	LOWELL	MASS	72	189	420	TORRINGTON	CONN	70	63	420	TORRINGTON	CONN	70	63	420	TORRINGTON	CONN	70	63	420	TORRINGTON	CONN	70	63			
361	KALAMAZOO	MICH	72	217	421	NEW BEDFORD	MASS	70	194	421	NEW BEDFORD	MASS	70	194	421	NEW BEDFORD	MASS	70	194	421	NEW BEDFORD	MASS	70	194			
362	NEWTON	MASS	72	195	422	NIAGARA FALLS	NY	70	304	422	NIAGARA FALLS	NY	70	304	422	NIAGARA FALLS	NY	70	304	422	NIAGARA FALLS	NY	70	304			
363	POCATELLO	ID	72	92	423	WATERTOWN	NY	70	313	423	WATERTOWN	NY	70	313	423	WATERTOWN	NY	70	313	423	WATERTOWN	NY	70	313			
364	CAMBRIDGE	MASS	72	179	424	NASHUA	NH	70	256	424	NASHUA	NH	70	256	424	NASHUA	NH	70	256	424	NASHUA	NH	70	256			
365	WEDFORD	MASS	72	192	425	MANCHESTER	NH	70	255	425	MANCHESTER	NH	70	255	425	MANCHESTER	NH	70	255	425	MANCHESTER	NH	70	255			
366	MALDEN	MASS	72	191	426	CONCORD	NH	69	254	426	CONCORD	NH	69	254	426	CONCORD	NH	69	254	426	CONCORD	NH	69	254			
367	BOSTON	MASS	72	177	427	RENO	NEV	69	253	427	RENO	NEV	69	253	427	RENO	NEV	69	253	427	RENO	NEV	69	253			
368	SCHENECTADY	NY	72	308	428	GREAT FALLS	MONT	69	250	428	GREAT FALLS	MONT	69	250	428	GREAT FALLS	MONT	69	250	428	GREAT FALLS	MONT	69	250			
369	SYRACUSE	NY	72	309	429	ROME	NY	69	307	429	ROME	NY	69	307	429	ROME	NY	69	307	429	ROME	NY	69	307			
370	WELLCUSE	MASS	72	193	430	TROY	NY	69	310	430	TROY	NY	69	310	430	TROY	NY	69	310	430	TROY	NY	69	310			
371	BAY CITY	MICH	72	208	431	LEWISTON	ME	69	171	431	LEWISTON	ME	69	171	431	LEWISTON	ME	69	171	431	LEWISTON	ME	69	171			
372	LYNN	MASS	72	190	432	MUSKOGON	MICH	69	220	432	MUSKOGON	MICH	69	220	432	MUSKOGON	MICH	69	220	432	MUSKOGON	MICH	69	220			
373	HOLYCKE	MASS	72	187	433	NORTHAMPTON	MASS	69	196	433	NORTHAMPTON	MASS	69	196	433	NORTHAMPTON	MASS	69	196	433	NORTHAMPTON	MASS	69	196			
374	CHELSEA	MASS	72	180	434	TAUNTON	MASS	69	203	434	TAUNTON	MASS	69	203	434	TAUNTON	MASS	69	203	434	TAUNTON	MASS	69	203			
375	BRIDGEPORT	CONN	72	53	435	SANTA FE	NM	69	287	435	SANTA FE	NM	69	287	435	SANTA FE	NM	69	287	435	SANTA FE	NM	69	287			
376	DENVER	COLORADO	72	51	436	SAN DIEGO	CAL	69	39	436	SAN DIEGO	CAL	69	39	436	SAN DIEGO	CAL	69	39	436	SAN DIEGO	CAL	69	39			
377	LAWRENCE	MASS	71	189	437	SPEKANE	PENN	69	472	437	SPEKANE	PENN	69	472	437	SPEKANE	PENN	69	472	437	SPEKANE	PENN	69	472			
378	YULETOWN	MASS	71	212	438	HAZELTON	WIS	69	378	438	HAZELTON	WIS	69	378	438	HAZELTON	WIS	69	378	438	HAZELTON	WIS	69	378			
379	ROCHESTER	NY	71	205	439	GREEN BAY	WIS	68	467	439	GREEN BAY	WIS	68	467	439	GREEN BAY	WIS	68	467	439	GREEN BAY	WIS	68	467			
380	WORCESTER	MASS	71	201	440	PLAINFIELD	WIS	68	481	440	PLAINFIELD	WIS	68	481	440	PLAINFIELD	WIS	68	481	440	PLAINFIELD	WIS	68	481			
381	PONTIAC	MICH	71	221	441	CHICAGO	ILL	68	481	441	CHICAGO	ILL	68	481	441	CHICAGO	ILL	68	481	441	CHICAGO	ILL	68	481			
382	LANSTING	MICH	71	218	442	CLEVELAND	MASS	68	185	442	CLEVELAND	MASS	68	185	442	CLEVELAND	MASS	68	185	442	CLEVELAND	MASS	68	185			
383	STAMFORD	CONN	71	62	443	QUINCY	MASS	68	198	443	QUINCY	MASS	68	198	443	QUINCY	MASS	68	198	443	QUINCY	MASS	68	198			
384	NORWALK	CONN	71	61	444	GRAND FORKS	ND	68	327	444	GRAND FORKS	ND	68	327	444	GRAND FORKS	ND	68	327	444	GRAND FORKS	ND	68	327			
385	NEW LONDON	CONN	71	60	445	VALLEJO	CAL	67	49	445	VALLEJO	CAL	67	49	445	VALLEJO	CAL	67	49	445	VALLEJO	CAL	67	49			
386	FARGO	ND	71	326	446	SALEM	ORE	67	369	446	SALEM	ORE	67	369	446	SALEM	ORE	67	369	446	SALEM	ORE	67	369			
387	NEW HAVEN	CONN	71	59	447	SOUTH GATE	CAL	67	47	447	SOUTH GATE	CAL	67	47	447	SOUTH GATE	CAL	67	47	447	SOUTH GATE	CAL	67	47			
388	BROCKTON	MASS	71	178	448	PITTSFIELD	MASS	67	197	448	PITTSFIELD	MASS	67	197	448	PITTSFIELD	MASS	67	197	448	PITTSFIELD	MASS	67	197			
389	FITCHBURG	MASS	71	184	449	PORTLAND	ME	67	172	449	PORTLAND	ME	67	172	449	PORTLAND	ME	67	172	449	PORTLAND	ME	67	172			
390	JAMESTOWN	NY	71	296	450	SAN JOSE	CAL	67	41	450	SAN JOSE	CAL	67	41	450	SAN JOSE	CAL	67	41	450	SAN JOSE	CAL	67	41			
391	WAUKEGAN	ILL	71	118	451	LYNWOOD	CAL	67	28	451	LYNWOOD	CAL	67	28	451	LYNWOOD	CAL	67	28	451	LYNWOOD	CAL	67	28			
392	HEMPSTEAD	NY	71	294	452	INGLEWOOD	CAL	67	25	452	INGLEWOOD	CAL	67	25	452	INGLEWOOD	CAL	67	25	452	INGLEWOOD	CAL	67	25			
393	ELMIRA	NY	71	293	453	HUNTINGTON PARK	CAL	67	24	453	HUNTINGTON PARK	CAL	67	24	453	HUNTINGTON PARK	CAL	67	24	453	HUNTINGTON PARK	CAL	67	24			
394	SAGINAW	MICH	71	224	454	ALHAMBRA	CAL	67	16	454	ALHAMBRA	CAL	67	16	454	ALHAMBRA	CAL	67	16	454	ALHAMBRA	CAL	67	16			
395	ROCHESTER	MINN	71	228	455	COMPTON	CAL	67	21	455	COMPTON	CAL	67	21	455	COMPTON	CAL	67	21	455	COMPTON	CAL	67	21			
396	BINGHAMTON	NY	71	291	456	BEVERLY HILLS	CAL	67	19	456	BEVERLY HILLS	CAL	67	19	456	BEVERLY HILLS	CAL	67	19	456	BEVERLY HILLS	CAL	67	19			
397	AUBURN	NY	71	290	457	MAUSAU	WIS	67	477	457	MAUSAU	WIS	67	477	457	MAUSAU	WIS	67	477	457	MAUSAU	WIS	67	477			
398	ALBANY	NY	71	288	458	VANCOUVER	WASH	66	454	458	VANCOUVER	WASH	66	454	458	VANCOUVER	WASH	66	454	458	VANCOUVER	WASH	66	454			
399	FLINT	MICH	71	212	459	SANTA BARBARA	CAL	66	45	459	SANTA BARBARA	CAL	66	45	459	SANTA BARBARA	CAL	66	45	459	SANTA BARBARA	CAL	66	45			
400	CRANSTON	RI	71	396	460	SANTA MONICA	CAL	66	46	460	SANTA MONICA	CAL	66	46	460	SANTA MONICA	CAL	66	46	460	SANTA MONICA	CAL	66	46			
401	WEST ELLIS	WIS	71	479	461	EUGENE	ORE	66	367	461	EUGENE	ORE	66	367	461	EUGENE	ORE	66	367	461	EUGENE	ORE	66	367			
402	WAUWATOSA	WIS	71	478	462	DULUTH	MINN	65	226	462	DULUTH	MINN	65	226	462	DULUTH	MINN	65	226	462	DULUTH	MINN	65	226			
403	PROVIDENCE	RI	71	399	463	SEATTLE	WASH	65	451	463	SEATTLE	WASH	65	451	463	SEATTLE	WASH	65	451	463	SEATTLE	WASH	65	451			
404	WARWICK	RI	71	400	464	SUPERIOR	WIS	65	476	464	SUPERIOR	WIS	65	476	464	SUPERIOR	WIS	65	476	464	SUPERIOR	WIS	65	476			
405	YAKIMA	WASH	71	455	465	PORTLAND	ORE	64	368	465	PORTLAND	ORE	64	368	465	PORTLAND	ORE	64	368	465	PORTLAND	ORE	64	368			
406	MILWAUKEE	WIS	71	472	466	PALO ALTO	CAL	64	30	466	PALO ALTO	CAL	64	30	466	PALO ALTO	CAL	64	30	466	PALO ALTO	CAL	64	30			
407	NEWPORT	RI	71	397	467	RECHMOO CITY	CAL	64	34	467	RECHMOO CITY	CAL	64	34	467	RECHMOO CITY	CAL	64	34	467	RECHMOO CITY	CAL	64	34			
408	APPLETON	WIS	71	463	468	SHEBOYGAN	WIS	63	475	468	SHEBOYGAN	WIS	63	475	468	SHEBOYGAN	WIS	63	475	468	SHEBOYGAN	WIS	63	475			
409	MANSFIELD	OHIO	71	345	469	TACOMA	WASH	63	453	469	TACOMA	WASH	63	453	469	TACOMA	WASH	63	453	469	TACOMA	WASH	63	453			
410	BURLINGTON	VT	70	437	470	RICHMOND	CAL	62	35	470	RICHMOND	CAL	62	35	470	RICHMOND	CAL	62	35	470	RICHMOND	CAL	62	35			
411	ALTOONA	PENN	70	372	471	OAKLAND	CAL	62	29	471	OAKLAND	CAL	62	29	471	OAKLAND	CAL	62	29	471	OAKLAND	CAL	62	29			
412	REDONDO BEACH	CAL	70	33	472	SAN MATEO	CAL	62	43	472	SAN MATEO	CAL	62	43	472	SAN MATEO	CAL	62	43	472	SAN MATEO	CAL	62	43			
413	LONG BEACH	CAL	70	26	473	SAN LEANDRO	CAL	62	42	473	SAN LEANDRO	CAL	62	42	473	SAN LEANDRO	CAL	62	42	473	SAN LEANDRO	CAL	62	42			
414	BUFFALO	NY	70	292	474	BERKELEY	CAL	62	18	474	BERKELEY	CAL	62	18	474	BERKELEY	CAL	62	18	474	BERKELEY	CAL	62	18			
415	ST. CLOUD	MINN	70	229	475	ALAMEDA	CAL	62	15	475	ALAMEDA	CAL	62	15	475	ALAMEDA	CAL	62	15	475	ALAMEDA	CAL	62	15			
416	ST. LOUIS	MO	70	295	476	BUTTE	MONT	62	249	476	BUTTE	MONT	62	249	476	BUTTE	MONT	62	249	476	BUTTE	MONT	62	249			
417	LACKAWANNA	NY	70	298	477	EVERETT	WASH	61	450	477	EVERETT	WASH	61	450	477	EVERETT	WASH	61	450	477	EVERETT	WASH	61	450			
418	LOCKPORT	NY	70	299	478	BREMERTON	WASH	60	449	478	BREMERTON	WASH	60	449	478	BREMERTON	WASH	60	449	478	BREMERTON	WASH	60	449			
419	BANGOR	ME	70	170	479	BELLINGHAM	WASH	60	448	479	BELLINGHAM	WASH	60	448	479	BELLINGHAM	WASH	60	448	479	BELLINGHAM	WASH	60	448			
					480	SAN FRANCISCO																					

CITIES RANKED BY 1950 POPULATION RANKED BY 1950 POPULATION

(25)					(25)				
RANK	CITY	STATE	1950 POP.	PAGE	RANK	CITY	STATE	1950 POP.	PAGE
1	HOBOKEN	NJ	50676	267	60	COVINGTON	KY	10071	157
2	UNION CITY	NJ	42721	282	61	RELLEVILLE	NJ	10006	259
3	WEST NEW YORK	NJ	34257	283	62	EASTON	PENN	9898	375
4	NEW YORK CITY	NY	25046	303	63	MAYWOOD	ILL	9812	110
5	SOMERVILLE	MASS	24964	201	64	WEST ELLIS	WIS	9763	479
6	JERSEY CITY	NJ	23001	269	65	DAYTON	OHIO	9755	337
7	HAMTRACK	MICH	20645	214	66	LEXINGTON	KY	9743	158
8	EAST CRANCE	NJ	20344	263	67	NEWPORT	KY	9701	160
9	CAMBRIDGE	MASS	19474	179	68	MINNEAPOLIS	MINN	9697	227
10	CHELSEA	MASS	19456	180	69	ELIZABETH	NJ	9642	264
11	IRVINGTON	NJ	19097	268	70	LYNN	MASS	9590	190
12	PASSAIC	NJ	18614	277	71	COLUMBUS	OHIO	9541	335
13	NEWARK	NJ	17779	281	72	PAWTUCKET	RI	9469	398
14	TRENTON	NJ	17779	300	73	PERTH AMERCY	KY	9393	279
15	MOUNT VERNON	NY	17536	299	74	LOUISVILLE	KY	9251	159
16	CHICAGO	ILL	17450	299	75	ROCHESTER	NY	9236	306
17	CHICAGO	ILL	17450	299	76	NEW HAVEN	CONN	9187	59
18	ORANGE	CAL	17285	276	77	BLOOMFIELD	NJ	9131	260
19	PATERSON	NJ	17202	278	78	WASHINGTON	PENN	9062	391
20	BOSTON	MASS	16767	177	79	SCHENECTADY	NY	8999	308
21	PHILADELPHIA	PENN	16286	386	80	EVANSTON	ILL	8981	105
22	MILKINSBURG	PENN	15709	393	81	ATLANTA	GA	8979	84
23	HIGHLAND PARK	MICH	15464	215	82	SANTA MONICA	CAL	8949	46
24	BAYONNE	NJ	14847	258	83	TONKERS	NY	8894	315
25	LANCASTER	PENN	14831	380	84	ST. LOUIS	MO	8871	113
26	BUFFALO	NY	14724	292	85	PEDEST	ILL	8637	301
27	MCKEESPORT	PENN	14715	382	86	NEWBURGH	NY	8546	305
28	CAMDEN	NJ	14483	261	87	POUGHKEEPSIE	NY	8418	166
29	EVERETT	MASS	14369	182	88	CHAMPAIGN	ILL	8413	166
30	YORK	PENN	14275	395	89	OWENSBORO	KY	8413	166
31	HARRISBURG	PENN	14213	377	90	CANTON	OHIO	8292	331
32	CHESTER	PENN	14051	374	91	ALEXANDRIA	VA	8238	438
33	ST. LOUIS	MO	14046	245	92	GALVESTON	TEX	8218	423
34	PROVIDENCE	RI	13892	399	93	SAVANNAH	GA	8194	90
35	OAK PARK	ILL	13517	112	94	WEDFORD	MASS	8162	192
36	BERWYN	ILL	13495	16	95	SACRAMENTO	CAL	8140	37
37	EAST CLEVELAND	OHIO	13349	338	96	FERNDALE	MICH	8020	211
38	DETROIT	MICH	13249	210	97	BINGHAMTON	NY	7988	291
39	DISTRICT OF COLUMBIA	WIS	13065	66	98	NUTLEY	NJ	7939	275
40	MILWAUKEE	WIS	12748	472	99	TOLEDO	OHIO	7927	357
41	GARFIELD	NJ	12523	265	100	NASHVILLE	TENN	7923	413
42	PITTSBURGH	PENN	12487	387	101	HEMPSTEAD	NY	7874	294
43	MALDEN	MASS	12459	191	102	SPRINGFIELD	ILL	7849	117
44	READING	PENN	12423	388	103	PORTSMOUTH	VA	7847	445
45	CLEVELAND	OHIO	12197	333	104	LEBANON	PENN	7821	381
46	LAKELAND	MO	12156	342	105	TROY	NY	7775	310
47	BALTIMORE	MD	12067	173	106	INDIANAPOLIS	IND	7739	127
48	LAWRENCE	MASS	12020	188	107	RACINE	WIS	7738	474
49	BERKELEY	CAL	11979	118	108	ALTOONA	PENN	7718	372
50	BERKELEY	ILL	11646	100	109	CHARLESTON	WV	7656	456
51	JOHNSTOWN	PENN	11531	378	110	HAMILTON	OHIO	7625	341
52	WILMINGTON	DELA	11531	392	111	BLOOMINGTON	IND	7612	120
53	WILKES-BARRE	PENN	11134	350	112	LYNWOOD	CAL	7595	28
54	NORWOOD	OHIO	10938	385	113	MAUMATOSA	WIS	7574	478
55	NORRISTOWN	PENN	10893	385	114	NORFOLK	VA	7571	443
56	BRIDGEPORT	CONN	10870	53	115	GRAND RAPIDS	MICH	7543	213
57	HUNTINGTON PARK	CAL	10518	24	116	LOWELL	MASS	7539	189
58	HARTFORD	CONN	10195	55	117	VALLENTINE	NEBR	7459	312
59	NEWPORT NEWS	VA	10085	442	118	BILLINGS	MT	7403	248
					119	SHARON	PENN	7348	390

RANK	CITY	1950			(1950 POP. (26))	1930				
		STATE	POP.	DEN.		PAGE	STATE	POP.	PAGE	
120	ALHAMBRA	CAL	7337	16	NEW CASTLE	180	PENN	6261	381	
121	ANN ARBOR	MICH	7311	206		181	PHOENIX	ARIZ	6247	B
122	SOUTH GATE	CAL	7302	47		182	AUGRA	ILL	6244	94
123	AUGUSTA	GA	7297	85		183	MAISON	WIS	6237	470
124	MIAMI	FLA	7289	73		184	DENVER	COLOR	6224	51
125	OAKLAND	CAL	7256	29		185	RICHMOND	VA	6208	446
126	LONG BEACH	CAL	7227	26		186	STUEBENVILLE	OHIO	6185	356
127	CLEVELAND HEIGHTS	OHIO	7212	334		187	OMAHA	NEB	6170	252
128	NIAGARA FALLS	NY	7155	304		188	HUNTINGTON	WV	6168	459
129	KANSAS	WIS	7154	468		189	BELOIT	WIS	6165	464
130	EVANSVILLE	IND	7146	123		190	MARION	OHIO	6149	346
131	DECATUR	IND	7126	102		191	KEY WEST	FLA	6147	71
132	FORT WAYNE	IND	7107	124		192	EAST ST. LOUIS	ILL	6141	103
133	ALBANY	NY	7105	288		193	FRESNO	CAL	6111	22
134	ELMIRA	NY	7102	293		194	ZANESVILLE	OHIO	6047	360
135	WYANDOTTE	MICH	7086	225		195	NEW ROCHELLE	NY	6033	302
136	MONTCLAIR	NJ	7085	272		196	ALAMEDA	CAL	6021	15
137	FARGO	ND	7084	326		197	MARION	IND	6016	130
138	SAN LEANDRO	CAL	7062	42		198	YAKIMA	WASH	6013	455
139	PLAINFIELD	NJ	7061	280		199	PUERTO	COLOR	6008	52
140	NEW BRUNSWICK	NJ	7057	274		200	STOCKTON	CAL	6004	48
141	CLARKSBURG	WV	6960	457		201	RALEIGH	NC	5971	322
142	ERIE	PENN	6958	376		202	ST. PAUL	MINN	5965	230
143	COMPTON	CAL	6955	21		203	ALBUQUERQUE	PENN	5939	370
144	KANSAS CITY	KAN	6928	152		204	PACATULLO	ID	5939	92
145	RICHMOND	CAL	6865	35		205	WILMINGTON	NC	5927	324
146	TULSA	OKLA	6864	366	206	JACKSON	TENN	5923	409	
147	QUINCY	ILL	6795	114	207	HAZELTON	PENN	5915	378	
148	COLUMBIA	SC	6790	403	208	SAN ANTONIO	TEX	5877	429	
149	KOKOMO	IND	6785	128	209	PENSACOLA	FLA	5876	77	
150	JACKSONVILLE -	FLA	6772	70	210	NEW ALBANY	IND	5869	134	
151	UNIVERSITY CITY	MO	6761	247	211	MAGNET	GA	5864	188	
152	SHERIDAN	WIS	6725	475	212	MUNIC	IND	5868	133	
153	ALBANY	PENN	6714	371	213	WYCKSBOCKETT	RI	5838	401	
154	CINCINNATI	OHIO	6711	332	214	PORTLAND	ORE	5829	368	
155	LAFAYETTE	IND	6711	129	215	BEVERLY HILLS	CAL	5806	19	
156	GRAND FORKS	ND	6709	327	216	WARREN	OHIO	5797	358	
157	MANFELD	OHIO	6702	345	217	DANVILLE	VA	5749	440	
158	JOLIET	ILL	6701	108	218	SOUTH BEND	IND	5738	136	
159	ROCKFORD	ILL	6638	113	219	NEW BEDFORD	MASS	5717	194	
160	COLUMBUS	GA	6634	86	220	SALINA	KAN	5690	153	
161	NEW KENSINGTON	PENN	6617	384	221	BESSEMER	ALA	5689	2	
162	SEATTLE	WASH	6604	431	222	ALLIANCE	OHIO	5687	329	
163	NORMAN	OKLA	6587	364	223	KANSAS CITY	MO	5665	243	
164	REVERE	MASS	6565	199	224	WHEELING	WV	5663	462	
165	TAMPA	FLA	6562	80	225	ROCHESTER	MINN	5639	228	
166	KALAMAZOO	MICH	6557	217	226	ALEXANDRIA	LA	5631	163	
167	WICHITA	KAN	6548	155	227	MELROSE	MASS	5623	193	
168	LANSING	MICH	6534	218	228	SAN JOSE	CAL	5605	41	
169	LIMA	OHIO	6525	343	229	SAGINAW	MICH	5597	224	
170	BUTTE	MONT	6520	249	230	ST. JOSEPH	MO	5574	244	
171	INGLEWOOD	CAL	6505	25	231	FLINT	MICH	5568	212	
172	SPRINGFIELD	OHIO	6488	355	232	ABILENE	TEX	5557	414	
173	BILOXI	MISS	6453	232	233	CLIFTON	NJ	5514	262	
174	REMERTON	WASH	6437	79	234	WORCESTER	MASS	5500	205	
175	MIAMI BEACH	FLA	6428	44	235	APPLETON	WIS	5485	463	
176	UTICA	NY	6426	311	236	OSHKOSH	WIS	5478	473	
177	HACKENSACK	NJ	6352	266	237	BAY CITY	MICH	5471	208	
178	BLOOMINGTON	ILL	6326	97	238	MUSKOGON	MICH	5441	220	
179	TOPEKA	KAN	6303	154	239	ITHACA	NY	5418	295	

RANK	CITY	STATE	1950 POP.	DEN.	PAGE
240	DURHAM	NC	5402	318	318
241	PARKERSBURG	WV	5397	461	
242	SALEM	ORE	5393	369	369
243	NEW BRITAIN	CONN	5381	58	
244	AMSTERDAM	NY	5373	289	289
245	NEWPORT	RI	5366	397	
246	ATLANTIC CITY	NJ	5361	257	257
247	ELGIN	ILL	5328	104	
248	SHREVEPORT	LA	5300	169	169
249	KANKAKEE	ILL	5277	109	
250	MOLINE	ILL	5267	111	111
251	TERRE HAUTE	IND	5263	137	
252	SALEM	MASS	5235	200	200
253	EAST CHICAGO	IND	5216	121	
254	SPARTANBURG	SC	5182	193	193
255	TURCHON	IND	5132	359	
256	SPRINGFIELD	MASS	5123	202	202
257	WILLIAMSPORT	PENN	5119	394	
258	AKRON	OHIO	5114	328	328
259	BELEVILLE	ILL	5113	95	
260	HAGERSTOWN	MD	5107	175	175
261	EL PASO	TEX	5097	421	
262	ALTON	ILL	5086	93	93
263	MORILE	ALA	5079	5	
264	FOND DU LAC	WIS	5074	466	466
265	BOISE	ID	5058	91	
266	SCRANTON	PENN	5042	389	389
267	CORPUS CHRIS	TEX	5037	419	
268	DURQUE	IOWA	5017	144	144
269	JACKSON	MICH	5009	216	
270	NEW LONDON	CONN	5008	60	60
271	LAFAYETTE	LA	5006	165	
272	MORGANTOWN	WV	5005	460	460
273	BIRMINGHAM	ALA	4993	3	
274	QUINCY	MASS	4990	198	198
275	LINCOLN PARK	MICH	4968	219	
276	ROCKY MOUNT	NC	4946	323	323
277	KNOXVILLE	TENN	4912	411	
278	PASADENA	CAL	4910	31	31
279	SPRINGFIELD	MO	4907	246	
280	VANCOUVER	WASH	4902	454	454
281	NEWARK	OHIO	4896	349	
282	PINE BLUFF	ARK	4890	14	14
283	COLORADO SPRINGS	COLO	4889	50	
284	GAINESVILLE	FLA	4884	69	69
285	TUALOOSA	ALA	4867	7	
286	ST. LOUIS	MO	4864	12	12
287	LOUISVILLE	KY	4861	166	
288	TOPEKA	KAN	4859	126	126
289	LACKAWANNA	NY	4852	298	
290	EUGENE	ORE	4849	367	367
291	WISHAWAKA	IND	4840	132	
292	GREENVILLE	MISS	4828	233	233
293	WICHITA FALLS	TEX	4826	433	
294	SAN MATEO	CAL	4803	43	43
295	OKLAHOMA CITY	OKLA	4793	365	
296	TUCSON	ARIZ	4785	9	9
297	ANDERSON	IND	4778	119	
298	CUMBERLAND	MD	4769	174	174
299	PORT HURON	MICH	4763	222	

RANK	CITY	STATE	1950 POP.	DEN.	PAGE
300	NEWTON	MASS	4740	195	195
301	FORT DODGE	IOWA	4739	145	
302	FAIRMONT	WV	4733	458	458
303	PORT ARTHUR	TEX	4716	427	
304	BARBERTON	OHIO	4715	330	330
305	GLENDALE	CAL	4714	23	
306	BAKERSFIELD	CAL	4701	17	17
307	CHATTANOOGA	TENN	4680	408	
308	ENID	OKLA	4678	361	361
309	BURBANK	CAL	4677	20	
310	WINSTON-SALEM	NC	4671	325	325
311	LORAIN	OHIO	4655	344	
312	RENO ISLAND	NEV	4642	253	253
313	ROCK LEBLANC	ILL	4639	116	
314	COLUMBIA	MICH	4635	216	216
315	VALLEJO	MO	4632	230	
316	WHITE PLAINS	NY	4624	314	314
317	JAMESTOWN	NY	4564	296	
318	GREAT FALLS	MONT	4560	250	250
319	MIDDLETOWN	OHIO	4553	348	
320	PETERSBURG	VA	4552	444	444
321	LA CROSSE	WIS	4527	469	
322	LAWTON	OKLA	4514	362	362
323	KEARNY	NJ	4489	270	
324	WAUSAU	WIS	4473	477	477
325	CHARLOTTE	NC	4468	317	
326	MASSILLON	OHIO	4417	347	347
327	VALLEJO	CAL	4413	49	
328	EVERETT	WASH	4396	450	450
329	AUBURN	NY	4372	290	
330	LCS ANGELES	CAL	4370	27	27
331	SHAKER HEIGHTS	OHIO	4342	354	
332	GRANITE CITY	ILL	4333	107	107
333	TALLAHASSEE	FLA	4323	79	
334	CHEYENNE	WY	4316	480	480
335	MICHIGAN CITY	IND	4302	131	
336	JOHNSON CITY	TENN	4287	410	410
337	EUCID	OHIO	4224	340	
338	LUBBOCK	TEX	4220	426	426
339	SANTA ANA	CAL	4216	44	
340	REDONDO BEACH	CAL	4204	33	33
341	MERIDIAN	MISS	4189	237	
342	BATON ROUGE	LA	4160	164	164
343	LINCOLN	NEB	4155	251	
344	SIOUX FALLS	SD	4149	407	407
345	AUSTIN	TEX	4126	416	
346	DAYTON	OHIO	4119	142	142
347	GRANTSPORO	NC	4087	320	
348	WATGERSBY	WY	4081	320	320
349	HIGH POINT	NC	4079	320	
350	CHARLOTTESVILLE	VA	4058	439	439
351	WAUKEGAN	ILL	4057	118	
352	WATERLOO	NY	4041	313	313
353	SANDUSKY	OHIO	4024	353	
354	ROYAL OAK	MICH	3908	223	223
355	SPOKANE	WASH	3897	452	
356	KINGSTON	NY	3894	297	297
357	ASHLAND	KY	3891	156	
358	DALLAS	TEX	3879	420	420
359	DANVILLE	ILL	3864	101	

1950				(1950 POP. DEN., CONT.)				1950							
RANK		CITY		STATE		POP. DEN.		RANK		CITY		STATE		POP. DEN.	
360	ROME	GA	3846	89	420	BROCKTON	MASS	2937	178						
361	LAREDO	TEX	3845	425	421	ROSWELL	NM	2892	286						
362	MUSKOGEE	OKLA	3844	363	422	VICKSBURG	MISS	2881	238						
363	ELYRIA	OHIO	3836	339	423	NEW ORLEANS	LA	2861	168						
364	WALTHAM	MASS	3805	204	424	CEDAR RAPIDS	IOWA	2846	139						
365	PALO ALTO	CAL	3802	50	425	LINDEN	NJ	2761	271						
366	MEMPHIS	TENN	3800	412	426	BURLINGTON	IOWA	2753	338						
367	GREEN BAY	WIS	3794	467	427	WINONA	MINN	2721	231						
368	WATERBURY	CONN	3785	64	428	LAKELAND	FLA	2706	72						
369	PAIDUCAH	KY	3773	162	429	HATTIESBURG	MISS	2704	234						
370	HUTCHINSON	KAN	3772	151	430	SANTA BARBARA	CAL	2673	45						
371	DEARBORN	MICH	3755	209	431	CHICAGO	MASS	2646	181						
372	ALBANY	GA	3754	82	432	JEFFERSON CITY	MO	2642	241						
373	HAMMOND	IND	3727	126	433	HOLYOKE	MASS	2603	187						
374	HOUSTON	TEX	3726	424	434	POMONA	CAL	2584	32						
375	WEST PALM BEACH	FLA	3721	81	435	MANCHESTER	NH	2577	255						
376	PONTIAC	MICH	3721	221	436	MONROE	LA	2366	167						
377	ORLANDO	FLA	3714	75	437	LAKE CHARLES	LA	2358	166						
378	ELKHART	IND	3713	122	438	MASON CITY	IOWA	2293	147						
379	INDEPENDENCE	MO	3696	240	439	WEST ORANGE	NJ	2288	284						
380	TEMPLE	TEX	3691	430	440	JOPLIN	MO	2264	242						
381	BROWNSVILLE	TEX	3680	418	441	RAPID CITY	SD	2145	406						
382	HOT SPRINGS	ARK	3663	11	442	WATERLOO	IOWA	2083	150						
383	ASHEVILLE	NC	3655	316	443	EAU CLAIRE	WIS	2060	465						
384	JACKSON	MISS	3640	235	444	GADSDEN	ALA	2049	4						
385	FAYETTEVILLE	NC	3616	319	445	ALBUQUERQUE	NM	2021	285						
386	PORTLAND	ME	3594	172	446	NORWALK	CONN	2002	61						
387	GREENVILLE	SC	3590	404	447	STAMFORD	CONN	1976	62						
388	GALESBURG	ILL	3571	106	448	FORT LAUDERDALE	FLA	1943	68						
389	REHLEHEM	PENN	3567	373	449	PANAMA CITY	FLA	1926	76						
390	AMARILLO	TEX	3552	415	450	CRANSTON	RI	1918	396						
391	LOCKPORT	NY	3540	299	451	MEYER	MASS	1917	56						
392	LYNCHBURG	VA	3535	441	452	BEVERLY	MASS	1913	176						
393	ROANOKE	VA	3469	447	453	FORT SMITH	ARK	1910	10						
394	OTTUMWA	IOWA	3467	148	454	ST. LOUIS	IOWA	1866	149						
395	REDWOOD CITY	CAL	3452	34	455	LA GRANGE	GA	1853	78						
396	OGDEN	UTAH	3440	434	456	ST. LOUIS	GA	1840	87						
397	PORTSMOUTH	OHIO	3439	352	457	SAN ANGELO	TEX	1809	428						
398	CUYAHOGA FALLS	OHIO	3435	336	458	DULUTH	MINN	1678	226						
399	LAUREL	MISS	3430	236	459	PROVO	UTAH	1654	435						
400	ST. CLOUD	MINN	3382	229	460	BELLINGHAM	WASH	1624	448						
401	SALT LAKE CITY	UTAH	3379	436	461	FITCHBURG	MASS	1552	184						
402	MANTICOM	WIS	3366	471	462	HAVERHILL	MASS	1478	186						
403	SAN DIEGO	CAL	3364	39	463	PARMA	OHIO	1459	351						
404	DAYTONA BEACH	FLA	3354	67	464	CHARLESTON	SC	1370	402						
405	ANNISTON	ALA	3340	1	465	BRISTOL	CONN	1352	54						
406	FALL RIVER	MASS	3303	183	466	PITTSFIELD	MASS	1304	197						
407	NORTH LITTLE ROCK	ARK	3291	13	467	WARWICK	RI	1284	400						
408	WACO	TEX	3258	432	468	RIVERSIDE	CAL	1196	36						
409	DES MOINES	IOWA	3242	145	469	LEWISTON	ME	1181	171						
410	SAN BERNARDINO	CAL	3234	138	470	NASHUA	NH	1108	256						
411	CLINTON	IOWA	3219	125	471	STOUCHESTER	MASS	1049	185						
412	TYLER	TEX	3093	431	472	SANTA FE	NM	1033	287						
413	BURLINGTON	VT	3070	437	473	BANGOR	ME	977	170						
414	TACOMA	WASH	2989	453	474	SUPERIOR	WIS	965	476						
415	BEAUMONT	TEX	2994	417	475	NORTHAMPTON	MASS	860	196						
416	FORT WORTH	TEX	2975	422	476	TAUNTON	MASS	848	203						
417	COUNCIL BLUFFS	IOWA	2969	141	477	TORRINGTON	CONN	734	67						
418	ATHENS	GA	2966	83	478	MIDDLETON	CONN	711	57						
419					480	CONCORD	NH	437	254						

CITIES RANKED BY 1970 POPULATION DENSITY				
RANK	CITY	STATE	1970 POP. DEN.	PAGE
1	UNION CITY	NJ	45028	282
2	WEST NEW YORK	NJ	40627	283
3	HOBOKEN	NJ	32414	267
4	NEW YORK CITY	NY	26343	303
5	SOMERVILLE	MASS	21653	201
6	IRVINGTON	NJ	20401	268
7	EAST ORANGE	NJ	19352	263
8	JERSEY CITY	NJ	17255	269
9	PATERSON	NJ	17241	278
10	PASSAIC	NJ	17226	277
11	MOUNT VERNON	NY	16925	300
12	NEWARK	NJ	16273	273
13	CAMBRIDGE	MASS	16187	179
14	SAN FRANCISCO	CAL	15764	40
15	PHILADELPHIA	PENN	15164	386
16	CHICAGO	ILL	15126	99
17	DORCHESTER	MASS	14803	276
18	CHELSEA	MASS	14583	180
19	GARFIELD	NJ	13965	265
20	TRENTON	NJ	13952	281
21	ROSTON	MASS	13936	177
22	MIAMI BEACH	FLA	13605	74
23	BAYVIEW	NJ	13471	258
24	BERNARD	ILL	13462	96
25	OAK PARK	ILL	13300	112
26	HAMPSHIRE	MICH	12974	214
27	EVERETT	MASS	12874	182
28	EAST CLEVELAND	OHIO	12774	359
29	LAKWOOD	OHIO	12157	342
30	DISTRICT OF COLUMBIA	PENN	12131	393
31	WILKINSBURG	PENN	11985	374
32	CHESTER	MICH	11815	215
33	BLUMENFELD PARK	MICH	11568	175
34	ELMWOOD	ILL	11562	173
35	CICERO	ILL	11547	312
36	VALLEY STREAM	NY	11542	315
37	YONKERS	NJ	11395	261
38	CAMDEN	CAL	11248	24
39	HUNTINGTON PARK	NY	11205	292
40	BUFFALO	ILL	11124	110
41	MAYWOOD	CAL	11011	18
42	BERKELEY	MASS	11005	191
43	MALDEN	MICH	10953	210
44	DETROIT	ILL	10641	105
45	EVANSTON	CAL	10637	46
46	SANTA MONICA	PENN	10603	385
47	NORRISTOWN	NY	10371	254
48	HEMPSTEAD	NJ	10189	259
49	RELEVILLE	MO	10167	245
50	ST. LOUIS	CAL	10111	25
51	INGLEWOOD	RI	9901	399
52	PROVIDENCE	OHIO	9893	333
53	CLEVELAND	MASS	9840	188
54	LAWRENCE	FLA	9763	73
55	MIAMI	CONN	9635	260
56	BRIDGEPORT	NJ	9629	264
57	BLOOMFIELD	OHIO	9506	350
58	ELIZABETH	OHIO		
59	NORWOOD	OHIO		

1970					(1970 POPULATION DENSITY CONT.)					1970							
RANK	CITY	STATE	POP.	DEN.	PAGE	RANK	CITY	STATE	POP.	DEN.	PAGE	RANK	CITY	STATE	POP.	DEN.	PAGE
120	WILMINGTON	DEL	6231		65	180	KOKOMO	IND	4787		128	180	KOKOMO	IND	4787		128
121	TROY	NY	6230	310		181	PORT HURON	MICH	4773		222	181	PORT HURON	MICH	4773		222
122	LEBANON	PENN	6211	381		182	NEWPORT	RI	4735		397	182	NEWPORT	RI	4735		397
123	ALBANY	PENN	6153	371		183	TOLEDO	OHIO	4727		357	183	TOLEDO	OHIO	4727		357
124	LOS ANGELES	CAL	6073	27		184	WORCESTER	MASS	4721		205	184	WORCESTER	MASS	4721		205
125	LOUISVILLE	KY	6025	159		185	FORT LAUDERDALE	FLA	4716		68	185	FORT LAUDERDALE	FLA	4716		68
126	SHARON	PENN	5961	390		186	LEXINGTON	KY	4702		158	186	LEXINGTON	KY	4702		158
127	ST. PAUL	MINN	5938	230		187	LACKAWANNA	NY	4698		298	187	LACKAWANNA	NY	4698		298
128	WOODSOKET	RI	5927	401		188	ITHACA	NY	4683		295	188	ITHACA	NY	4683		295
129	OWENSBORO	KY	5921	161		189	FARGO	ND	4680		326	189	FARGO	ND	4680		326
130	BURRANK	CAL	5917	20		190	LIMA	OHIO	4593		343	190	LIMA	OHIO	4593		343
131	FLINT	MICH	5894	212		191	BUTTE	MONT	4592		249	191	BUTTE	MONT	4592		249
132	BEVERLY HILLS	CAL	5862	19		192	ANN ARBOR	MICH	4578		206	192	ANN ARBOR	MICH	4578		206
133	NORFOLK	VA	5855	443		193	OMAHA	NEB	4534		252	193	OMAHA	NEB	4534		252
134	SINGAMTON	NY	5829	291		194	GLENDALE	CAL	4513		23	194	GLENDALE	CAL	4513		23
135	ST. ANNA	CAL	5800	44		195	PETERSBURG	VA	4513		444	195	PETERSBURG	VA	4513		444
136	CINCINNATI	OHIO	5794	332		196	APLETON	WIS	4499		463	196	APLETON	WIS	4499		463
137	CANTON	OHIO	5792	331		197	HAUMOTOSA	WIS	4479		478	197	HAUMOTOSA	WIS	4479		478
138	SHAKER HEIGHTS	OHIO	5763	354		198	HAMMOND	IND	4473		126	198	HAMMOND	IND	4473		126
139	MCKEESPORT	PENN	5754	382		199	SAVANNAH	GA	4416		90	199	SAVANNAH	GA	4416		90
140	KENDSHA	WIS	5752	468		200	GRAND RAPIDS	MICH	4402		213	200	GRAND RAPIDS	MICH	4402		213
141	UTICA	NY	5726	311		201	AMSTERDAM	NY	4401		289	201	AMSTERDAM	NY	4401		289
142	CUYAHOGA FALLS	OHIO	5710	336		202	MORGANTOWN	WV	4391		460	202	MORGANTOWN	WV	4391		460
143	ALBANY	NY	5540	288		203	VALLEJO	CAL	4390		49	203	VALLEJO	CAL	4390		49
144	ELMIRA	NY	5472	293		204	BLOXT	MISS	4368		232	204	BLOXT	MISS	4368		232
145	QUINCY	MASS	5464	198		205	BARBERTON	OHIO	4349		330	205	BARBERTON	OHIO	4349		330
146	MARION	OHIO	5443	346		206	RELEVILLE	ILL	4344		95	206	RELEVILLE	ILL	4344		95
147	OSHKOSH	WIS	5431	473		207	PUEBLO	COLOR	4331		52	207	PUEBLO	COLOR	4331		52
148	GOVINGTON	KY	5416	157		208	PONTIAC	MICH	4329		221	208	PONTIAC	MICH	4329		221
149	SAN LEANDRO	CAL	5409	42		209	ROCKFORD	ILL	4309		115	209	ROCKFORD	ILL	4309		115
150	DENVER	COLOR	5406	51		210	SOUTH BEND	IND	4301		136	210	SOUTH BEND	IND	4301		136
151	CLARKSBURG	WV	5405	457		211	PORTLAND	ORE	4294		368	211	PORTLAND	ORE	4294		368
152	MUNCIE	IND	5397	133		212	ALLIANCE	OHIO	4282		329	212	ALLIANCE	OHIO	4282		329
153	SAGINAW	MICH	5309	224		213	DEARBORN	MICH	4253		209	213	DEARBORN	MICH	4253		209
154	ALBUQUERQUE	PENN	5304	370		214	JACKSON	MICH	4251		216	214	JACKSON	MICH	4251		216
155	WARREN	OHIO	5291	358		215	HAMILTON	OHIO	4242		341	215	HAMILTON	OHIO	4242		341
156	AURORA	ILL	5261	94		216	GRAND FORKS	ND	4240		327	216	GRAND FORKS	ND	4240		327
157	NEW BEDFORD	MASS	5219	194		217	HAGERSTOWN	MD	4219		175	217	HAGERSTOWN	MD	4219		175
158	NEW KENSINGTON	PENN	5208	384		218	BROCKTON	MASS	4200		178	218	BROCKTON	MASS	4200		178
159	NEW LONDON	CONN	5185	60		219	JAMESTOWN	NY	4189		296	219	JAMESTOWN	NY	4189		296
160	SPRINGFIELD	MASS	5171	202		220	BILLINGS	MONT	4189		248	220	BILLINGS	MONT	4189		248
161	WHITE PLAINS	NY	5168	314		221	GARY	IND	4177		125	221	GARY	IND	4177		125
162	LAFAYETTE	IND	5167	129		222	WILLIAMSPORT	PENN	4167		394	222	WILLIAMSPORT	PENN	4167		394
163	HAZELTON	PENN	5157	378		223	YOUNGSTOWN	OHIO	4160		446	223	YOUNGSTOWN	OHIO	4160		446
164	BLOOMINGTON	IND	5106	120		224	RICHMOND	VA	4140		446	224	RICHMOND	VA	4140		446
165	NEWTON	MASS	5087	195		225	MOLINE	ILL	4128		111	225	MOLINE	ILL	4128		111
166	AKRON	OHIO	5082	328		226	MARION	IND	4126		130	226	MARION	IND	4126		130
167	GRANITE CITY	ILL	5055	107		227	PATON ROUGE	LA	4108		164	227	PATON ROUGE	LA	4108		164
168	HUNTINGTON	WV	5055	459		228	GREAT FALLS	MONT	4088		250	228	GREAT FALLS	MONT	4088		250
169	SHEBOYGAN	WIS	5050	475		229	KEARNY	NJ	4085		270	229	KEARNY	NJ	4085		270
170	EAST ST. LOUIS	ILL	5036	103		230	ZANESVILLE	OHIO	4080		360	230	ZANESVILLE	OHIO	4080		360
171	NEW CASTLE	PENN	5008	383		231	KANKAKEE	ILL	4072		109	231	KANKAKEE	ILL	4072		109
172	SALEM	MASS	5007	200		232	AUBURN	NY	4070		290	232	AUBURN	NY	4070		290
173	PASADENA	CAL	4992	31		233	PARKERSBURG	WV	4056		461	233	PARKERSBURG	WV	4056		461
174	GREENVILLE	MISS	4956	233		234	WAUKESHA	ILL	4054		118	234	WAUKESHA	ILL	4054		118
175	RAY CITY	MICH	4945	208		235	SCRANTON	PENN	4030		389	235	SCRANTON	PENN	4030		389
176	WALTHAM	MASS	4927	204		236	ROCHESTER	MINN	4012		228	236	ROCHESTER	MINN	4012		228
177	SPRINGFIELD	OHIO	4906	355		237	COLUMBUS	OHIO	4009		335	237	COLUMBUS	OHIO	4009		335
178	JOLIET	ILL	4871	108		238	YAKIMA	WASH	3999		455	238	YAKIMA	WASH	3999		455
179	PARMA	OHIO	4818	351		239	FRESNO	CAL	3971		22	239	FRESNO	CAL	3971		22

				(1970 POPULATION DENSITY CONT.)							
RANK	CITY	STATE	1970 POP.	DEN.	PAGE	RANK	CITY	STATE	1970 POP.	DEN.	PAGE
240	BLOOMINGTON	ILL	3960	97		300	DANVILLE	ILL	3300	101	
241	LANSING	MICH	3938	218		301	BATTLE CREEK	MICH	3299	207	
242	AUGUSTA	GA	3938	85		302	LANFORD	NEB	3296	172	
243	ALBUQUERQUE	CONN	3914	64		303	CLARK	FLA	3293	434	
244	ST. PETERSBURG	FLA	3903	78		304	GREEN	FLA	3287	80	
245	CHARLESTON	SC	3892	402		305	TUCSON	ARIZ	3287	9	
246	OMAHA	CAL	3867	32		306	SAN JOSE	CAL	3273	41	
247	ATLANTIC CITY	NJ	3860	257		307	TACOMA	WASH	3241	453	
248	EVANSVILLE	IND	3855	123		308	RICHMOND	IND	3212	135	
249	PORTSMOUTH	VA	3826	445		309	BOISE	ID	3205	91	
250	BURLINGTON	VT	3825	437		310	SHREVEPORT	LA	3200	169	
251	EAST CHICAGO	IND	3820	121		311	WICHITA	KAN	3197	155	
252	ELGIN	ILL	3814	104		312	DALLAS	TEX	3179	420	
253	QUINCY	ILL	3806	114		313	LOCKPORT	NY	3175	299	
254	DURUQUE	IOWA	3799	144		314	DES MOINES	IOWA	3174	143	
255	BIRMINGHAM	ALA	3785	3		315	CHARLOTTE	NC	3173	317	
256	ATLANTA	GA	3779	84		316	NEWARK	OHIO	3146	349	
257	FOND DU LAC	WIS	3778	466		317	JACKSON	MISS	3067	235	
258	LINDEN	NJ	3764	271		318	ELYRIA	OHIO	3053	339	
259	CHARLOTTEVILLE	VA	3738	439		319	MANITOWOC	WIS	3039	471	
260	BETHLEHEM	PENN	3727	373		320	LINCOLN	NEB	3033	251	
261	CUMBERLAND	MD	3716	174		321	ATHENS	GA	3016	83	
262	MISHAWAKA	IND	3700	132		322	PORTLAND	ME	3015	172	
263	ST. CLOUD	MINN	3675	229		323	NEW ORLEANS	LA	3011	168	
264	MASSILLON	OHIO	3656	347		324	FAIRMONT	WV	2999	458	
265	ASHLAND	KY	3656	156		325	GALESBURG	ILL	2975	106	
266	WEST ORANGE	NJ	3643	284		326	SALT LAKE CITY	UTAH	2966	436	
267	SPRINGFIELD	ILL	3641	117		327	ALBUQUERQUE	NM	2965	285	
268	WHEELING	WV	3623	462		328	KANSAS CITY	KAN	2961	152	
269	ROCK ISLAND	ILL	3609	116		329	GREENVILLE	SC	2957	404	
270	ALTON	ILL	3609	93		330	DECATUR	ILL	2954	102	
271	BREMERTON	WASH	3603	449		331	GALVESTON	TEX	2943	423	
272	ORLANDO	FLA	3600	173		332	FALL RIVER	MASS	2936	183	
273	STOCKTON	CAL	3600	48		333	EUGENE	ORE	2925	367	
274	WILMINGTON	DE	3596	41		334	PUCATELLO	ID	2922	92	
275	SARASOTA	FLA	3596	383		335	STOUX FALLS	SD	2900	407	
276	DAYTON	OHIO	3589	480		336	MONTGOMERY	ALA	2875	6	
277	STUBENVILLE	OHIO	3578	356		337	MEMPHIS	TENN	2868	412	
278	WADSON	WIS	3572	470		338	ST. LOUIS	MO	2856	422	
279	PINE BLUFF	ARK	3565	14		339	HOUSTON	TEX	2841	181	
280	SAN ANTONIO	TEX	3555	429		340	CUITCOPEE	MASS	2813	181	
281	VANCOUVER	WASH	3541	454		341	BELOIT	WIS	2791	464	
282	LORAIN	OHIO	3506	344		342	DANVILLE	VA	2778	440	
283	LAKE CHARLES	ILL	3492	416		343	SALEM	ORE	2776	369	
284	KALAMAZOO	MICH	3492	217		344	ELKHART	IND	2766	122	
285	ALEXANDRIA	LA	3463	163		345	ROCKY MOUNT	NC	2765	323	
286	GRANOKO	VA	3463	447		346	WAUSAU	WIS	2757	477	
287	BROWNSVILLE	TEX	3455	418		347	TALLAHASSEE	FLA	2755	79	
288	FORT WAYNE	IND	3450	124		348	HUTCHINSON	KAN	2753	151	
289	LAFAYETTE	LA	3445	165		349	MANCHESTER	NH	2734	255	
290	MUSKOGEE	MICH	3433	220		350	SPARTANBURG	SC	2733	405	
291	NEW ALBANY	IND	3398	134		351	EL PASO	TEX	2724	421	
292	PEORIA	ILL	3395	113		352	REDWOOD CITY	CAL	2716	34	
293	LAKE CHARLES	LA	3391	166		353	SACRAMENTO	CAL	2712	37	
294	LAREDO	TEX	3367	425		354	RALEIGH	NC	2708	322	
295	LA CROSSE	WIS	3365	469		355	TERRE HAUTE	IND	2693	137	
296	SPOKANE	WASH	3357	452		356	BAKERSFIELD	CAL	2684	17	
297	WATERTOWN	NY	3346	313		357	PADUCAH	KY	2658	162	
298	SANTA BARBARA	CAL	3344	45		358	RAPID CITY	SD	2657	406	
299	KINGSTON	NY	3317	297		359	GREENSBORO	NC	2648	320	

RANK	CITY	STATE	1970		RANK	CITY	STATE	1970	
			POP.	DEN.				POP.	DEN.
360	WILMINGTON	NC	2638	324	420	MASON CITY	IA	2006	147
361	TOPEKA	KAN	2632	154	421	NEWPORT NEWS	VA	2000	442
362	CHARLESTON	WV	2629	456	422	DAYTONA BEACH	FLA	1988	67
363	OURHAM	NC	2608	318	423	LUBBOCK	TEX	1970	426
364	PROVO	UTAH	2592	435	424	INDIANAPOLIS	IND	1963	127
365	ASHEVILLE	NC	2587	316	425	ANNISTON	ALA	1959	1
366	BEVERLY	MASS	2574	176	426	RIVERSIDE	CAL	1959	36
367	CRANSTON	RI	2554	396	427	SPRINGFIELD	MO	1953	246
368	MIDDLETOWN	OHIO	2540	348	428	TULSA	OKLA	1929	366
369	MCNROE	LA	2539	167	429	FORT WORTH	TEX	1919	422
370	ST. JOSEPH	MO	2533	244	430	MICHIGAN CITY	IND	1911	131
371	LITTLE ROCK	ARK	2509	12	431	ANDERSON	IND	1908	119
372	TYLER	TEX	2501	431	432	SAN ANGELO	TEX	1896	428
373	BACON	GA	2498	88	433	RELLINGHAM	WASH	1893	448
374	BURLINGTON	IOWA	2490	138	434	ENID	OKLA	1873	361
375	OTTUMWA	IOWA	2488	148	435	EVERETT	WASH	1830	450
376	PENSACOLA	FLA	2479	77	436	NASHUA	NH	1778	256
377	GAINESVILLE	FLA	2472	69	437	LAUREL	MISS	1775	237
378	ALBANY	GA	2470	82	438	MERIDIAN	MISS	1775	237
379	RICHMOND	CAL	2463	35	439	JEFFERSON CITY	MO	1724	241
380	WICKSBURG	MISS	2426	238	440	DAVENPORT	IA	1666	142
381	RENO	NEV	2405	253	441	GADSDEN	ALA	1664	4
382	TUSCALOOSA	ALA	2400	7	442	LA GRANGE	GA	1664	87
383	HOLYOKE	MASS	2398	187	443	MUSKOGEE	OKLA	1659	363
384	WARWICK	RI	2398	400	444	SIOUX CITY	IA	1652	149
385	LAWTON	OKLA	2387	362	445	WORTLE	ALA	1630	5
386	SALT LAKE CITY	KAN	2387	153	446	WACO	TEX	1624	432
387	MERIDEN	CONN	2361	56	447	REAR MOUNT	TEX	1619	417
388	WINSTON-SALEM	NC	2352	325	448	KANSAS CITY	MO	1603	243
389	SAN BERNARDINO	CAL	2348	38	449	FITCHBURG	MASS	1559	184
390	PHOENIX	ARIZ	2346	8	450	HOT SPRINGS	ARK	1523	11
391	INDEPENDENCE	MO	2336	240	451	WEST PALM BEACH	FLA	1494	81
392	NORTH LITTLE ROCK	ARK	2327	13	452	DULUTH	MINN	1494	226
393	PANAMA CITY	FLA	2326	76	453	COUNCIL BLUFFS	IOWA	1494	141
394	BESEMER	ALA	2321	2	454	TEMPLE	TEX	1479	430
395	JACKSON	TENN	2312	409	455	HAVERHILL	MASS	1428	186
396	WICHITA FALLS	TEX	2312	433	456	PITTSFIELD	MASS	1411	197
397	FAYETTEVILLE	NC	2287	319	457	COLUMBIA	MO	1410	239
398	MANFELD	OHIO	2284	345	458	ROSWELL	NM	1401	286
399	ROME	GA	2278	89	459	SANTA FE	NM	1400	287
400	CHATTANOOGA	TENN	2268	408	460	FORT SMITH	ARK	1396	10
401	KNOXVILLE	TENN	2267	411	461	JOPLIN	MO	1368	242
402	PORTSMOUTH	OHIO	2265	352	462	WATERLOO	IOWA	1276	150
403	EAU CLAIRE	WIS	2242	465	463	LEWISTON	ME	1207	171
404	COLORADO SPRINGS	COLO	2221	50	464	ABILENE	TEX	1197	414
405	PALO ALTO	CAL	2221	30	465	PORT ARTHUR	TEX	1190	427
406	IOWA CITY	IOWA	2220	146	466	GLOUCESTER	MASS	1131	185
407	COLUMBUS	GA	2218	86	467	COLUMBIA	SC	1069	403
408	SAN DIEGO	CAL	2199	39	468	CLINTON	IOWA	1049	140
409	HATTIESBURG	MISS	2187	234	469	BANGOR	ME	967	170
410	CEDAR RAPIDS	IOWA	2182	139	470	TAUNTON	MASS	931	203
411	JOHNSON CITY	TENN	2165	413	471	NASHVILLE	TENN	882	413
412	FORT DOBIE	IOWA	2156	145	472	NORTHAMPTON	MASS	865	196
413	LYNCHBURG	VA	2155	441	473	SUPERIOR	WIS	853	476
414	GREEN BAY	WIS	2106	467	474	MICHAELSTOWN	CONN	839	57
415	AMARILLO	TEX	2092	415	475	TORRINGTON	CONN	807	63
416	PHISTOL	CONN	2086	54	476	ROME	NY	691	307
417	HIGH POINT	NC	2052	321	477	JACKSONVILLE	FLA	690	70
418	WINONA	MINN	2034	231	478	OKLAHOMA CITY	OKLA	577	365
419	CORPUS CHRISTI	TEX	2033	419	479	CONCORD	NH	474	254
					480	NORMAN	OKLA	300	364

CITIES RANKED BY 1949 MEDIAN FAMILY INCOME															
(33)															
1949 MED. FAM. INC.															
RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE
1	SHAKER HEIGHTS	OHIO	8109	354	60	ROCKFORD	ILL	3992	115	ILL	3992	115	ILL	3992	115
2	BEVERLY HILLS	CAL	6489	19	61	AURORA	ILL	3991	94	ILL	3991	94	ILL	3991	94
3	CLEVELAND HEIGHTS	OHIO	5646	334	62	MADISON	WIS	3989	470	WIS	3989	470	WIS	3989	470
4	EVANSTON	ILL	5491	105	63	HIGHLAND PARK	MICH	3977	215	MICH	3977	215	MICH	3977	215
5	OAK PARK	ILL	5415	112	64	TOLEDO	OHIO	3968	357	OHIO	3968	357	OHIO	3968	357
6	MAUMATOSA	WIS	5249	478	65	MISHAWAKA	IND	3967	132	IND	3967	132	IND	3967	132
7	UNIVERSITY CITY	MO	4922	247	66	CHICAGO	ILL	3956	99	ILL	3956	99	ILL	3956	99
8	SAN MATEO	CAL	4907	43	67	DETROIT	MICH	3955	210	MICH	3955	210	MICH	3955	210
9	NEWTON	MASS	4768	195	68	LYNWOOD	CAL	3949	28	CAL	3949	28	CAL	3949	28
10	BERWYN	ILL	4706	96	69	FARGO	ND	3947	326	ND	3947	326	ND	3947	326
11	LAKEWOOD	OHIO	4705	342	70	SEATTLE	WASH	3947	451	WASH	3947	451	WASH	3947	451
12	PALO ALTO	CAL	4657	30	71	POCATELLO	ID	3937	92	ID	3937	92	ID	3937	92
13	DEARBORN	MICH	4655	209	72	BELLEVIEW	NJ	3934	259	NJ	3934	259	NJ	3934	259
14	WEST ORANGE	NJ	4642	284	73	MIDDLETOWN	OHIO	3933	348	OHIO	3933	348	OHIO	3933	348
15	ALEXANDRIA	VA	4642	438	74	STAMFORD	CONN	3925	62	CONN	3925	62	CONN	3925	62
16	ROYAL OAK	MICH	4633	223	75	SAN FRANCISCO	CAL	3923	40	CAL	3923	40	CAL	3923	40
17	NUTLEY	NJ	4577	275	76	EUGENE	ORE	3910	367	ORE	3910	367	ORE	3910	367
18	MONTCLAIR	NJ	4570	272	77	MOLINE	ILL	3908	111	ILL	3908	111	ILL	3908	111
19	EUCLID	OHIO	4537	340	78	SHARON	PENN	3895	390	PENN	3895	390	PENN	3895	390
20	PARMA	OHIO	4499	351	79	ANN ARBOR	MICH	3881	206	MICH	3881	206	MICH	3881	206
21	MAYWOOD	ILL	4449	110	80	NORWALK	CONN	3874	61	CONN	3874	61	CONN	3874	61
22	BAKERSFIELD	CAL	4374	17	81	CHEYENNE	WY	3855	480	WY	3855	480	WY	3855	480
23	SOUTH BEND	IND	4349	136	82	JOLIET	ILL	3852	108	ILL	3852	108	ILL	3852	108
24	FERRDALE	MICH	4337	211	83	WILKINSBURG	PENN	3848	393	PENN	3848	393	PENN	3848	393
25	WHITE PLAINS	NY	4326	314	84	ELKHART	IND	3847	122	IND	3847	122	IND	3847	122
26	LINCOLN PARK	MICH	4272	219	85	HACKENSACK	NJ	3845	266	NJ	3845	266	NJ	3845	266
27	VALLEY STREAM	NY	4267	312	86	WATERLOO	IOWA	3841	150	IOWA	3841	150	IOWA	3841	150
28	EAST CLEVELAND	OHIO	4261	338	87	KEARNY	NJ	3837	270	NJ	3837	270	NJ	3837	270
29	CICERO	ILL	4255	100	88	GREAT FALLS	MONT	3835	250	MONT	3835	250	MONT	3835	250
30	HEMPSTEAD	NY	4248	294	89	MEDFORD	MASS	3832	192	MASS	3832	192	MASS	3832	192
31	SAN LEANDRO	CAL	4230	42	90	ALAMEDA	CAL	3828	15	CAL	3828	15	CAL	3828	15
32	CUYAHOGA FALLS	OHIO	4229	336	91	BILLINGS	MONT	3826	248	MONT	3826	248	MONT	3826	248
33	YONKERS	NY	4219	315	92	OAKLAND	CAL	3820	29	CAL	3820	29	CAL	3820	29
34	WAUKEGAN	ILL	4219	118	93	STOCKTON	CAL	3803	48	CAL	3803	48	CAL	3803	48
35	CLIFTON	NJ	4215	262	94	DISTRICT OF COLUMBIA	WIS	3800	66	WIS	3800	66	WIS	3800	66
36	NEW ROCHELLE	NY	4215	302	95	MILWAUKEE	NJ	3792	264	NJ	3792	264	NJ	3792	264
37	PLAINFIELD	NJ	4212	280	96	ELIZABETH	MINN	3784	227	MINN	3784	227	MINN	3784	227
38	HAMMOND	IND	4187	126	97	MINNEAPOLIS	MINN	3780	230	MINN	3780	230	MINN	3780	230
39	LINDEN	NJ	4176	271	98	ST. PAUL	IND	3779	121	IND	3779	121	IND	3779	121
40	INGLEWOOD	CAL	4161	25	99	EAST CHICAGO	MASS	3778	198	MASS	3778	198	MASS	3778	198
41	IRVINGTON	NJ	4116	268	100	QUINCY	CAL	3770	24	CAL	3770	24	CAL	3770	24
42	GLENDALE	CAL	4112	23	101	HUNTINGTON PARK	CAL	3770	24	CAL	3770	24	CAL	3770	24
43	MELROSE	MASS	4111	193	102	COMPTON	CAL	3761	21	CAL	3761	21	CAL	3761	21
44	SACRAMENTO	CAL	4106	317	103	FORT WAYNE	IND	3761	124	IND	3761	124	IND	3761	124
45	LANSEING	MICH	4097	218	104	KENOSHA	WIS	3758	468	WIS	3758	468	WIS	3758	468
46	MOUNT VERNON	NY	4095	300	105	FRESNO	CAL	3757	22	CAL	3757	22	CAL	3757	22
47	WYANDOTTE	MICH	4092	225	106	BREMERTON	WASH	3754	449	WASH	3754	449	WASH	3754	449
48	BERKELEY	CAL	4084	18	107	SPOKANE	WASH	3746	452	WASH	3746	452	WASH	3746	452
49	ALHAMBRA	CAL	4083	16	108	DAYTON	OHIO	3744	337	OHIO	3744	337	OHIO	3744	337
50	BLOOMFIELD	NJ	4057	260	109	PORT ARTHUR	TEX	3738	427	TEX	3738	427	TEX	3738	427
51	RACINE	WIS	4051	474	110	TRENTON	NJ	3735	281	NJ	3735	281	NJ	3735	281
52	WEST ELLIS	WIS	4044	479	111	MANSFIELD	OHIO	3728	345	OHIO	3728	345	OHIO	3728	345
53	REDWOOD CITY	CAL	4044	34	112	DES MOINES	IOWA	3720	143	IOWA	3720	143	IOWA	3720	143
54	SOUTH GATE	CAL	4043	47	113	PORTLAND	ORE	3719	368	ORE	3719	368	ORE	3719	368
55	PENO	NEV	4043	253	114	NIAGARA FALLS	NY	3716	304	NY	3716	304	NY	3716	304
56	BURBANK	CAL	4039	20	115	ROCK ISLAND	ILL	3715	116	ILL	3715	116	ILL	3715	116
57	ELGIN	ILL	4037	104	116	SCHENECTADY	NY	3713	308	NY	3713	308	NY	3713	308
58	EAST ORANGE	NJ	4005	263	117	DAVENPORT	IOWA	3710	142	IOWA	3710	142	IOWA	3710	142
59	FLINT	MICH	4002	212	118	SAN JOSE	CAL	3709	41	CAL	3709	41	CAL	3709	41
					119	ROCHESTER	MINN	3709	228	MINN	3709	228	MINN	3709	228

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RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE
120	HAYTRAMCK	MICH	3705	180	CLEVELAND	OHIO	3531
121	DAYONNE	NJ	3698	181	NEW YORK CITY	NY	303
122	RELIC	WIS	3697	182	DALLAS	TEX	3526
123	DUBUQUE	IOWA	3696	183	REDONDO BEACH	CAL	420
124	BOISE	ID	3692	184	OPANGE	NJ	3525
125	PONTIAC	MICH	3691	185	MIAMI BEACH	FLA	276
126	GARY	IND	3688	186	BRISTOL	CONN	3510
127	AMSTERDAM	NY	3684	187	DECATUR	ILL	74
128	LORAIN	OHIO	3681	188	CHICPEE	MASS	3507
129	SANTA MONICA	CAL	3677	189	GRFENSRERO	NC	102
130	PASACENA	CAL	3676	190	TULSA	OKLA	3506
131	SALT LAKE CITY	UTAH	3671	191	LANCASTER	PA	320
132	EAU CLAIRE	WIS	3670	192	SALEM	PENN	366
133	CEDAR RAPIDS	IOWA	3669	193	MICHIGAN CITY	IND	3502
134	SIOUX FALLS	SD	3669	194	ALLENTOWN	PA	380
135	GRAND RAPIDS	MICH	3669	195	GARFIELD	NJ	200
136	JACKSON	MICH	3660	196	YOUNGSTOWN	OHIO	371
137	COLUMBUS	OHIO	3660	197	VANCLUVER	WASH	3494
138	AMARILLO	TEX	3653	198	AKRON	OHIO	3493
139	CHAMPAIGN	ILL	3637	199	NORWORTH	OHIO	359
140	APPLETON	WIS	3635	200	ODERSON	OHIO	3480
141	KANKAKEE	ILL	3633	201	STOKES CITY	IND	3489
142	SALEM	ORE	3633	202	PORT HURON	MICH	119
143	VALLEJO	CAL	3632	203	SYRACUSE	NY	3472
144	NEW BRITAIN	CONN	3631	204	WATERBURY	CONN	3471
145	PASSAIC	NJ	3624	205	SANTA BARBARA	CAL	64
146	CHARLESTON	WV	3621	206	DULUTH	MINN	45
147	CRANSTON	RH	3610	207	JAMESTOWN	NY	226
148	PITTSFIELD	MASS	3607	208	WARWICK	RI	3463
149	WEST NEW YORK	NJ	3607	209	PERTH AMBOY	NJ	279
150	ELIZABETH	NY	3606	210	COUNCIL BLUFFS	IOWA	141
151	ELYRIA	OHIO	3606	211	MIDDLETOWN	CONN	3461
152	WING BEACH	CAL	3606	212	ALTON	ILL	93
153	SHERBOCAN	WIS	3602	213	HARTFORD	CONN	3459
154	STEUBENVILLE	OHIO	3601	214	SPRINGFIELD	MASS	55
155	PEORIA	ILL	3600	215	RETHLEHEM	PENN	202
156	POUGHKEEPSIE	NY	3595	216	BAY CITY	MICH	3458
157	KALAMAZOO	MICH	3593	217	ALQUIPPA	PENN	373
158	BATON ROUGE	LA	3593	218	SANDUSKY	OHIO	208
159	GREEN BAY	WIS	3591	219	LACKAMANNA	NY	352
160	GRANITE CITY	ILL	3581	220	ALBUQUERQUE	NM	298
161	LOS ANGELES	CAL	3575	221	OMAHA	NEB	3451
162	RATTLE CREEK	MICH	3569	222	MALDEN	MASS	285
163	ROCHESTER	NY	3561	223	SPRINGFIELD	ILL	3449
164	LA CROSSE	WIS	3557	224	SPRINGFIELD	ILL	191
165	INDIANAPOLIS	IND	3555	225	RUTTE	MONT	3446
166	SAN DIEGO	CAL	3554	226	CLARKSBURG	WV	249
167	DENVER	COLOR	3554	227	INDEPENDENCE	MO	457
168	FOND DU LAC	WIS	3550	228	ALBANY	NY	240
169	GRAND FORKS	ND	3550	229	LINCOLN	NEB	288
170	ERIE	PENN	3542	230	HAMILTON	OHIO	3431
171	SAGINAW	MICH	3541	231	LYNN	MASS	251
172	MASON CITY	IOWA	3541	232	EVERETT	WASH	190
173	FORT DODGE	IOWA	3540	233	TORRINGTON	CONN	3427
174	YAKIMA	WASH	3539	234	SOMERVILLE	MASS	450
175	TACOMA	WASH	3538	235	JERSEY CITY	MASS	63
176	WARREN	OHIO	3538	236	BEVERLY	NJ	201
177	NEW BRUNSWICK	NJ	3536	237	CLINTON	MASS	269
178	RICHMOND	CAL	3536	238	SARRENTON	IOWA	176
179				239	WICHITA	OHIO	3417
						KAN	3415
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1949 MED. FAM. INC.				1949 MED. FAM. INC.			
RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE
240	EVERETT	MASS	3408	300	NEW CASTLE	PENN	3280
241	ALLANCE	OHIO	3299	301	BALTIMORE	MD	3275
242	PATTERSON	NJ	3402	302	WORCESTER	MASS	3274
243	BUFFALO	NY	3401	303	WICHITA FALLS	TEX	3269
244	KANSAS CITY	MO	3401	304	UTICA	NY	3268
245	WALTHAM	MASS	3400	305	OSHKOSH	WIS	3268
246	BLOOMINGTON	ILL	3397	306	CONCORD	NH	3266
247	READING	PENN	3397	307	PROVO	UTAH	3265
248	BURLINGTON	IOWA	3396	308	BELLINGHAM	WASH	3264
249	SPRINGFIELD	OHIO	3394	309	CHESTER	PENN	3263
250	HOUSTON	TEX	3389	310	KANSAS CITY	KAN	3262
251	LAFAYETTE	IND	3389	311	SALINA	KAN	3260
252	SAN BERNARDINO	CAL	3387	312	TROY	NY	3257
253	LIMA	OHIO	3387	313	MANCHESTER	NH	3255
254	UNION CITY	NJ	3381	314	RALEIGH	NC	3253
255	GALESBURG	ILL	3377	315	FITCHBURG	MASS	3253
256	RICHMOND	IND	3376	316	ITHACA	NY	3252
257	SANTA ANA	CAL	3376	317	WATERTOWN	NY	3251
258	MANITOWOC	WIS	3373	318	BOSTON	MASS	3249
259	PARKERSBURG	WV	3364	319	OKLAHOMA CITY	OKLA	3248
260	TOPEKA	KAN	3355	320	IOWA CITY	IOWA	3245
261	PUEBLO	COLORADO	3354	321	CAMDEN	NJ	3241
262	LOCKPORT	NY	3353	322	EVANSVILLE	IND	3240
263	MASSILLON	OHIO	3352	323	LAKE CHARLES	LA	3234
264	ROANKE	VA	3352	324	OTTUMWA	IOWA	3222
265	AUBURN	NY	3350	325	REVERE	MASS	3221
266	CAMBRIDGE	MASS	3347	326	NEW LONDON	CONN	3216
267	POMONA	CAL	3347	327	ROSWELL	NM	3215
268	WILMINGTON	DEL	3346	328	KINGSTON	NY	3212
269	CHARLOTTE	NC	3346	329	SAGERSTOWN	MD	3209
270	MUNCIE	IND	3335	330	ST. LOUIS	MO	3208
271	MORRISTOWN	PENN	3335	331	MOBILE	NH	3205
272	SUPERIOR	WIS	3331	332	HOYME	MASS	3201
273	SUBSCK	TEX	3328	333	PHOENIX	ARIZ	3195
274	WYOMING	WY	3326	334	ASHLAND	KY	3190
275	ROMA	NY	3324	335	MCQUEENSPORT	PENN	3187
276	NEWBURGH	NY	3324	336	CORPUS CHRISTI	TEX	3187
277	BEAUMONT	TEX	3322	337	CINCINNATI	OHIO	3186
278	PHILADELPHIA	PENN	3322	338	NEW KENSINGTON	PENN	3182
279	ELMIRA	NY	3320	339	NORTHAMPTON	MASS	3180
280	MUSKEGON	MICH	3320	340	LOUISVILLE	KY	3166
281	LEBANON	PENN	3317	341	ABILENE	TEX	3162
282	BRIDGEPORT	CONN	3315	342	NEWARK	OHIO	3159
283	PITTSBURGH	PENN	3314	343	MORGANTOWN	WV	3154
284	EASTON	PENN	3309	344	CHELSEA	MASS	3149
285	FORT WORTH	TEX	3308	345	HUTCHINSON	KAN	3147
286	KOKOMO	IND	3304	346	NEW ALBANY	IND	3140
287	RAPID CITY	SD	3303	347	LEWISTON	ME	3137
288	HARRISBURG	PENN	3303	348	MARION	OHIO	3136
289	CANTON	OHIO	3301	349	COVINGTON	KY	3134
290	NEW HAVEN	CONN	3301	350	HOBOKEN	NJ	3125
291	ST. CLOUD	MINN	3301	351	WHEELING	WV	3125
292	FAIRMONT	WV	3299	352	HAVERHILL	MASS	3122
293	PANTUCKET	RI	3296	353	JEFFERSON CITY	MO	3120
294	YORK	PENN	3293	354	TERRE HAUTE	IND	3118
295	DANVILLE	ILL	3292	355	JOHNSTOWN	PENN	3118
296	BELLEVEILLE	ILL	3290	356	GLOUCESTER	MASS	3115
297	NEWARK	NJ	3288	357	WILLIAMSPORT	PENN	3114
298	RIVERSIDE	CAL	3286	358	GALVESTON	TEX	3112
299	RICHMOND	VA	3283	359	TUCSON	ARIZ	3110

360	BROCKTON	MASS	3109	178	420	NEW ORLEANS	LA	2767	168
361	EL PASO	TEX	3109	421	421	COLUMBIA	MO	2757	239
362	HAZELTON	PENN	3105	378	422	JOHNSON CITY	TENN	2746	410
363	HAZELTON	TEX	3098	416	423	KEY WEST	FLA	2744	71
364	ENID	OKLA	3097	361	424	MUSKOGEE	OKLA	2724	363
365	NORFOLK	VA	3097	443	425	KNOXVILLE	TENN	2709	411
366	LITTLE ROCK	ARK	3068	12	426	SAN ANTONIO	TEX	2685	429
367	WASHINGTON	PENN	3067	391	427	ORLANDO	FLA	2685	75
368	ZANESVILLE	OHIO	3064	360	428	JACKSONVILLE	FLA	2676	70
369	LOWELL	MASS	3063	189	429	ROCKY MOUNT	NC	2674	323
370	RURLINGTON	VT	3059	437	430	WINSTON-SALEM	NC	2668	325
371	HUNTINGTON	WV	3054	459	431	COLUMBIA	SC	2665	403
372	WCONSOCKET	RI	3051	401	432	ATLANTA	GA	2664	84
373	LAWRENCE	MASS	3048	188	433	MONTGOMERY	ALA	2658	6
374	FORT LAUDERDALE	FLA	3041	68	434	LAKE LAND	FLA	2655	72
375	COLORADO SPRINGS	COLO	3038	50	435	PANAMA CITY	FLA	2643	76
376	TYLER	TEX	3032	431	436	SPARTANBURG	SC	2630	405
377	PORTSMOUTH	OHIO	3029	352	437	FORT SMITH	ARK	2628	10
378	WINONA	MINN	3023	231	438	JACKSON	MISS	2608	235
379	DURHAM	NC	3014	318	440	JOPLIN	MO	2600	242
380	DANVILLE	VA	3005	440	441	FAVETTEVILLE	NC	2595	319
381	MIAMI	FLA	3004	73	442	LA GRANGE	GA	2583	87
382	TAUNTON	MASS	3003	203	443	ANNISTON	ALA	2574	1
383	BLOOMINGTON	IND	2991	120	444	COLUMBUS	GA	2571	89
384	NEWPORT	KY	2988	160	445	WEST PALM BEACH	FLA	2542	86
385	PORTLAND	ME	2980	172	446	NORTH LITTLE ROCK	ARK	2539	81
386	MARTIN	IND	2980	130	447	PADUCAH	KY	2526	13
387	CHARLOTTEVILLE	VA	2974	459	448	GAINESVILLE	FLA	2518	162
388	SANTA FE	NM	2964	287	449	PETERSBURG	VA	2500	69
389	ST. JOSEPH	MO	2960	174	450	JACKSON	TENN	2489	444
390	CUMBERLAND	MD	2960	174	451	ST. PETERSBURG	FLA	2459	409
391	TALLAHASSEE	FLA	2952	79	452	LAFAYETTE	LA	2459	178
392	PROVIDENCE	RI	2950	399	453	NASHVILLE	TENN	2455	165
393	WENCHORD	MASS	2947	191	454	CHATTANOOGA	TENN	2446	413
394	WILKESBORRE	PENN	2945	392	455	PENSACOLA	FLA	2431	408
395	WILKESBORRE	PENN	2945	392	456	LEXINGTON	KY	2429	177
396	LAKE RIVER	MASS	2943	183	457	LEXINGTON CITY	NJ	2428	257
397	SHREVEPORT	LA	2942	169	458	MOBILE	ALA	2408	167
398	NEWMAN	OKLA	2934	364	459	TAMPA	FLA	2400	160
399	EAST ST. LOUIS	ILL	2933	103	460	ALEXANDRIA	LA	2381	163
400	LAWTON	OKLA	2926	362	461	SAVANNAH	GA	2373	190
401	SCRANTON	PENN	2925	389	462	ALBANY	GA	2353	82
402	QUINCY	ILL	2924	114	463	HOT SPRINGS	ARK	2347	11
403	BANGOR	ME	2908	170	464	MACON	GA	2338	88
404	GREENVILLE	SC	2908	404	465	TUSCALOOSA	ALA	2333	7
405	ALTOONA	PENN	2907	372	466	BLOXT	MISS	2321	232
406	MEMPHIS	TENN	2859	412	467	RESSEMER	ALA	2304	2
407	NEWPORT	RI	2859	397	468	AUGUSTA	GA	2290	85
408	SAN ANGELO	TEX	2855	428	469	DAYTONA BEACH	FLA	2268	67
409	BIRMINGHAM	ALA	2826	3	470	ATHENS	GA	2248	83
410	WACO	TEX	2822	432	471	WILMINGTON	NC	2241	324
411	SPRINGFIELD	MO	2819	246	472	PINE BLUFF	ARK	2188	14
412	TEMPLE	TEX	2817	430	473	MERTIDIAN	MISS	2131	237
413	PORTSMOUTH	VA	2816	445	474	VICKSBURG	MISS	2127	238
414	MOBILE	ALA	2800	5	475	BROWNSVILLE	TEX	2076	418
415	NEWPORT NEWS	VA	2799	442	476	CHARLESTON	SC	2066	402
416	ASHESVILLE	NC	2795	316	477	HATTIESBURG	MISS	2055	234
417	OWENSBORO	KY	2782	161	478	LAUREL	MISS	1908	236
418	GAOSEN	NC	2773	4	479	GREENVILLE	MISS	1734	233
419	HIGH POINT	NC	2773	321	480	LAREDO	TEX	1587	425

1969 MED.					CITIES RANKED BY 1969 MEDIAN FAMILY INCOME					1969 MED.					CITIES RANKED BY 1969 MEDIAN FAMILY INCOME					1969 MED.					CITIES RANKED BY 1969 MEDIAN FAMILY INCOME				
RANK	CITY	STATE	FAMILY INCOME	PAGE	RANK	CITY	STATE	FAMILY INCOME	PAGE	RANK	CITY	STATE	FAMILY INCOME	PAGE	RANK	CITY	STATE	FAMILY INCOME	PAGE	RANK	CITY	STATE	FAMILY INCOME	PAGE	RANK	CITY	STATE	FAMILY INCOME	PAGE
1	BEVERLY HILLS	CAL	20434	19	60	QUINCY	ILL	11094	198	60	QUINCY	ILL	11094	198	60	QUINCY	ILL	11094	198	60	QUINCY	ILL	11094	198	60	QUINCY	ILL	11094	198
2	SHAKER HEIGHTS	OHIO	19928	354	61	KEARNY	NJ	11091	270	61	KEARNY	NJ	11091	270	61	KEARNY	NJ	11091	270	61	KEARNY	NJ	11091	270	61	KEARNY	NJ	11091	270
3	NEWTON	MASS	15381	195	62	MERIDEN	CONN	11089	56	62	MERIDEN	CONN	11089	56	62	MERIDEN	CONN	11089	56	62	MERIDEN	CONN	11089	56	62	MERIDEN	CONN	11089	56
4	PALO ALTO	CAL	15036	30	63	RENO	NEV	11085	253	63	RENO	NEV	11085	253	63	RENO	NEV	11085	253	63	RENO	NEV	11085	253	63	RENO	NEV	11085	253
5	MONTCLAIR	NJ	14498	272	64	WEST ELLIS	WIS	11050	479	64	WEST ELLIS	WIS	11050	479	64	WEST ELLIS	WIS	11050	479	64	WEST ELLIS	WIS	11050	479	64	WEST ELLIS	WIS	11050	479
6	EVANSTON	ILL	13932	105	65	SEATTLE	WASH	11037	451	65	SEATTLE	WASH	11037	451	65	SEATTLE	WASH	11037	451	65	SEATTLE	WASH	11037	451	65	SEATTLE	WASH	11037	451
7	WEST CRANGE	NJ	13879	284	66	MOLINE	ILL	11025	111	66	MOLINE	ILL	11025	111	66	MOLINE	ILL	11025	111	66	MOLINE	ILL	11025	111	66	MOLINE	ILL	11025	111
8	OAK PARK	ILL	13823	112	67	MARWICK	RI	11006	400	67	MARWICK	RI	11006	400	67	MARWICK	RI	11006	400	67	MARWICK	RI	11006	400	67	MARWICK	RI	11006	400
9	ROYAL OAK	ILL	13619	223	68	ALHAMBRA	CAL	11004	16	68	ALHAMBRA	CAL	11004	16	68	ALHAMBRA	CAL	11004	16	68	ALHAMBRA	CAL	11004	16	68	ALHAMBRA	CAL	11004	16
10	STAMFORD	CONN	13571	62	69	MOUNT VERNON	NY	10973	300	69	MOUNT VERNON	NY	10973	300	69	MOUNT VERNON	NY	10973	300	69	MOUNT VERNON	NY	10973	300	69	MOUNT VERNON	NY	10973	300
11	WHITE PLAINS	NY	13569	314	70	PLAINFIELD	NJ	10951	280	70	PLAINFIELD	NJ	10951	280	70	PLAINFIELD	NJ	10951	280	70	PLAINFIELD	NJ	10951	280	70	PLAINFIELD	NJ	10951	280
12	VALLEY STREAM	NY	13517	312	71	ROCKFORD	ILL	10934	115	71	ROCKFORD	ILL	10934	115	71	ROCKFORD	ILL	10934	115	71	ROCKFORD	ILL	10934	115	71	ROCKFORD	ILL	10934	115
13	HAUWATOSA	WIS	13432	478	72	CEDAR RAPIDS	IOWA	10900	139	72	CEDAR RAPIDS	IOWA	10900	139	72	CEDAR RAPIDS	IOWA	10900	139	72	CEDAR RAPIDS	IOWA	10900	139	72	CEDAR RAPIDS	IOWA	10900	139
14	CLEVELAND HEIGHTS	OHIO	13368	334	73	THUNDERBOLT	IND	10899	156	73	THUNDERBOLT	IND	10899	156	73	THUNDERBOLT	IND	10899	156	73	THUNDERBOLT	IND	10899	156	73	THUNDERBOLT	IND	10899	156
15	DEARBORN	MICH	13257	209	74	TACOMA	WA	10892	126	74	TACOMA	WA	10892	126	74	TACOMA	WA	10892	126	74	TACOMA	WA	10892	126	74	TACOMA	WA	10892	126
16	NEW ROCHELLE	NY	13183	302	75	NASHUA	NH	10866	256	75	NASHUA	NH	10866	256	75	NASHUA	NH	10866	256	75	NASHUA	NH	10866	256	75	NASHUA	NH	10866	256
17	SAN ANTONIO	CAL	13067	43	76	ELYRIA	OHIO	10866	339	76	ELYRIA	OHIO	10866	339	76	ELYRIA	OHIO	10866	339	76	ELYRIA	OHIO	10866	339	76	ELYRIA	OHIO	10866	339
18	ANN ARBOR	MICH	12819	206	77	APPLETON	WIS	10866	463	77	APPLETON	WIS	10866	463	77	APPLETON	WIS	10866	463	77	APPLETON	WIS	10866	463	77	APPLETON	WIS	10866	463
19	NUTLEY	NJ	12710	275	78	LANSTING	MICH	10839	218	78	LANSTING	MICH	10839	218	78	LANSTING	MICH	10839	218	78	LANSTING	MICH	10839	218	78	LANSTING	MICH	10839	218
20	NORWALK	CONN	12597	351	79	PASADENA	CAL	10825	31	79	PASADENA	CAL	10825	31	79	PASADENA	CAL	10825	31	79	PASADENA	CAL	10825	31	79	PASADENA	CAL	10825	31
21	PARMA	OHIO	12507	351	80	SANTA MONICA	CAL	10793	46	80	SANTA MONICA	CAL	10793	46	80	SANTA MONICA	CAL	10793	46	80	SANTA MONICA	CAL	10793	46	80	SANTA MONICA	CAL	10793	46
22	WELLS	MASS	12428	191	81	INDEPENDENCE	MO	10787	240	81	INDEPENDENCE	MO	10787	240	81	INDEPENDENCE	MO	10787	240	81	INDEPENDENCE	MO	10787	240	81	INDEPENDENCE	MO	10787	240
23	YORKEN PARK	WIS	12154	191	82	GRANSTON	RI	10778	396	82	GRANSTON	RI	10778	396	82	GRANSTON	RI	10778	396	82	GRANSTON	RI	10778	396	82	GRANSTON	RI	10778	396
24	REDWOOD CITY	CA	12131	219	83	NEW BRITAIN	CONN	10759	58	83	NEW BRITAIN	CONN	10759	58	83	NEW BRITAIN	CONN	10759	58	83	NEW BRITAIN	CONN	10759	58	83	NEW BRITAIN	CONN	10759	58
25	REDWOOD CITY	MICH	12131	219	84	INDIANAPOLIS	IND	10754	127	84	INDIANAPOLIS	IND	10754	127	84	INDIANAPOLIS	IND	10754	127	84	INDIANAPOLIS	IND	10754	127	84	INDIANAPOLIS	IND	10754	127
26	CLIFTON	CAL	12094	34	85	PITTSFIELD	MASS	10678	197	85	PITTSFIELD	MASS	10678	197	85	PITTSFIELD	MASS	10678	197	85	PITTSFIELD	MASS	10678	197	85	PITTSFIELD	MASS	10678	197
27	SAN JOSE	NJ	11947	262	86	ALAMEDA	CAL	10674	15	86	ALAMEDA	CAL	10674	15	86	ALAMEDA	CAL	10674	15	86	ALAMEDA	CAL	10674	15	86	ALAMEDA	CAL	10674	15
28	SAN JOSE	CAL	11938	42	87	PEORIA	ILL	10667	113	87	PEORIA	ILL	10667	113	87	PEORIA	ILL	10667	113	87	PEORIA	ILL	10667	113	87	PEORIA	ILL	10667	113
29	BERNARD	ILL	11927	41	88	RIVERSIDE	CAL	10651	36	88	RIVERSIDE	CAL	10651	36	88	RIVERSIDE	CAL	10651	36	88	RIVERSIDE	CAL	10651	36	88	RIVERSIDE	CAL	10651	36
30	BRISTOL	CONN	11836	96	89	LOCKPORT	NY	10617	299	89	LOCKPORT	NY	10617	299	89	LOCKPORT	NY	10617	299	89	LOCKPORT	NY	10617	299	89	LOCKPORT	NY	10617	299
31	EUGEN	OHIO	11835	54	90	VALLEJO	CAL	10596	49	90	VALLEJO	CAL	10596	49	90	VALLEJO	CAL	10596	49	90	VALLEJO	CAL	10596	49	90	VALLEJO	CAL	10596	49
32	CUYAHOGA FALLS	OHIO	11830	340	91	ST. PAUL	MINN	10544	230	91	ST. PAUL	MINN	10544	230	91	ST. PAUL	MINN	10544	230	91	ST. PAUL	MINN	10544	230	91	ST. PAUL	MINN	10544	230
33	UNIVERSITY CITY	MO	11778	336	92	BAYONNE	NJ	10542	258	92	BAYONNE	NJ	10542	258	92	BAYONNE	NJ	10542	258	92	BAYONNE	NJ	10542	258	92	BAYONNE	NJ	10542	258
34	BLOOMFIELD	NJ	11769	247	93	BELLEVILLE	ILL	10537	95	93	BELLEVILLE	ILL	10537	95	93	BELLEVILLE	ILL	10537	95	93	BELLEVILLE	ILL	10537	95	93	BELLEVILLE	ILL	10537	95
35	GLENDALE	CAL	11733	260	94	LOS ANGELES	CAL	10535	27	94	LOS ANGELES	CAL	10535	27	94	LOS ANGELES	CAL	10535	27	94	LOS ANGELES	CAL	10535	27	94	LOS ANGELES	CAL	10535	27
36	LAKEMOOD	CAL	11651	23	95	RACINE	WIS	10526	474	95	RACINE	WIS	10526	474	95	RACINE	WIS	10526	474	95	RACINE	WIS	10526	474	95	RACINE	WIS	10526	474
37	MAYWOOD	OHIO	11579	342	96	SAN FRANCISCO	CAL	10503	40	96	SAN FRANCISCO	CAL	10503	40	96	SAN FRANCISCO	CAL	10503	40	96	SAN FRANCISCO	CAL	10503	40	96	SAN FRANCISCO	CAL	10503	40
38	ROCHESTER	MINN	11563	228	97	ROCK ISLAND	ILL	10495	116	97	ROCK ISLAND	ILL	10495	116	97	ROCK ISLAND	ILL	10495	116	97	ROCK ISLAND	ILL	10495	116	97	ROCK ISLAND	ILL	10495	116
39	ELGIN	ILL	11555	104	98	TORRINGTON	CONN	10484	63	98	TORRINGTON	CONN	10484	63	98	TORRINGTON	CONN	10484	63	98	TORRINGTON	CONN	10484	63	98	TORRINGTON	CONN	10484	63
40	FERNDALE	MICH	11525	211	99	TOLEDO	OHIO	10474	357	99	TOLEDO	OHIO	10474	357	99	TOLEDO	OHIO	10474	357	99	TOLEDO	OHIO	10474	357	99	TOLEDO	OHIO	10474	357
41	WALTHAM	MASS	11523	204	100	JEFFERSON CITY	MO	10463	241	100	JEFFERSON CITY	MO	10463	241	100	JEFFERSON CITY	MO	10463	241	100	JEFFERSON CITY	MO	10463	241	100	JEFFERSON CITY	MO	10463	241
42	HEMPSTEAD	NY	11504	294	101	WATERBURY	CONN	10459	64	101	WATERBURY	CONN	10459	64	101	WATERBURY	CONN	10459	64	101	WATERBURY	CONN	10459	64	101	WATERBURY	CONN	10459	64
43	BUREKANK	CAL	11502	20	102	DURHAM	ILL	10454	144	102	DURHAM	ILL	10454	144	102	DURHAM	ILL	10454	144	102	DURHAM	ILL	10454	144	102	DURHAM	ILL	10454	144
44	BAUREGAN	ILL	11478	118	103	KANKAKEE	ILL	10442	109	103	KANKAKEE	ILL	10442	109	103	KANKAKEE	ILL	10442	109	103	KANKAKEE	ILL	10442	109	103	KANKAKEE	ILL	10442	109
45	ALEXANDRIA	VA	11474	438	104	DAVENPORT	IOWA	10418	142	104	DAVENPORT	IOWA	10418	142	104	DAVENPORT	IOWA	10418	142	104	DAVENPORT	IOWA	10418	142	104	DAVENPORT	IOWA	10418	142
46	MADISON	WIS	11385	470	105	MICHIGAN CITY	IND	10405	131	105	MICHIGAN CITY	IND	10405	131	105	MICHIGAN CITY	IND	10405	131	105	MICHIGAN CITY	IND	10405	131	105	MICHIGAN CITY	IND	10405	131
47	LINDEN	NJ	11368	271	106	WARREN	OHIO	10404	358	106	WARREN	OHIO	10404	358	106	WARREN	OHIO	10404	358	106	WARREN	OHIO	10404	358	106	WARREN	OHIO	10404	358
48	CHAMPAIGN	ILL	11323	98	107	FORT WAYNE	IND	10401	124	107	FORT WAYNE	IND	10401	124	107	FORT WAYNE	IND	10401	124	107	FORT WAYNE	IND	10401	124	107	FORT WAYNE	IND	10401	124
49	BELLEVILLE	NJ	11309	259	108	BECLTON	WIS	10371	468	108	BECLTON	WIS	10371	468	108	BECLTON	WIS	10371	468	108	BECLTON	WIS	10371	468	108	BECLTON	WIS	10371	

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RANK	CITY	STATE	FAMILY INCOME	PAGE
120	DES MOINES	IOWA	10239	143
121	DECATUR	ILL	10239	102
122	SOUTH BEND	IND	10231	136
123	BETHLEHEM	PENN	10218	373
124	MIDDELETOWN	OHIO	10213	348
125	OMAHA	NEB	10208	252
126	MALDEN	MASS	10204	191
127	COLUMBIA	MO	10193	239
128	GARFIELD	NJ	10193	265
129	KENOSHA	WIS	10191	468
130	LAFAYETTE	IND	10181	129
131	NORTHAMPTON	MASS	10180	196
132	EVERETT	WASH	10176	450
133	FARGO	ND	10175	326
134	GREENSBORO	NC	10166	320
135	SAN DIEGO	CAL	10166	39
136	FLINT	MICH	10161	212
137	MANITOWOC	WIS	10146	471
138	EAST ORANGE	NJ	10125	263
139	EAU CLAIRE	WIS	10118	465
140	SANTA ANA	CAL	10115	44
141	BLOOMINGTON	ILL	10106	97
142	CONCORD	NH	10092	294
143	LYNWOOD	CAL	10088	128
144	EVERETT	MASS	10086	182
145	RALEIGH	NC	10085	322
146	ORAIN	OHIO	10072	344
147	SHEBOGAN	WIS	10066	313
148	DETROIT	MICH	10021	210
149	Worcester	MASS	10038	205
150	Worcester	CAL	10030	17
151	BAVERSFIELD	CAL	10019	420
152	DALLAS	TEX	10019	420
153	POMONA	CAL	10014	32
154	GRAND RAPIDS	MICH	10004	213
155	ROCHESTER	NY	10002	306
156	BREMERTON	WASH	9997	449
157	EUGENE	ORE	9996	367
158	SACINAW	MICH	9995	224
159	BERKELEY	CAL	9987	18
160	CLINTON	IOWA	9975	140
161	GREEN BAY	WIS	9975	467
162	SANDUSKY	OHIO	9964	353
163	MINNEAPOLIS	MINN	9960	227
164	TAUNTON	MASS	9957	203
165	PHOENIX	ARIZ	9956	8
166	ALBANY	NY	9947	288
167	IOWA CITY	IOWA	9942	146
168	LINCOLN	NEB	9928	251
169	WATERLOO	IOWA	9920	150
170	KANSAS CITY	MO	9910	243
171	BURLINGTON	VT	9908	437
172	BAY CITY	MICH	9898	208
173	LACKAWANNA	NY	9898	298
174	HOUSTON	TEX	9876	424
175	TULSA	OKLA	9870	366
176	FORT LAUDERDALE	FLA	9865	68
177	SALEM	MASS	9861	200
178	BOISE	ID	9858	91
179	GALESBURG	ILL	9858	106
180	KALAMAZOO	MICH	9852	217
181	BRIDGEPORT	CONN	9849	53
182	GARY	IND	9819	125
183	EAST CLEVELAND	OHIO	9819	338
184	ANDERSON	IND	9816	119
185	CAMBRIDGE	MASS	9815	179
186	VANCOUVER	WASH	9815	454
187	PORTLAND	ORE	9799	368
188	PORT HURON	MICH	9792	222
189	SOUTH GATE	CAL	9788	47
190	JACKSON	MICH	9765	216
191	HAVERHILL	MASS	9756	186
192	GLOUCESTER	MASS	9750	185
193	NORRISTOWN	PENN	9750	385
194	POUGHKEEPSIE	NY	9746	305
195	LYNN	MASS	9739	190
196	CHICOPEE	MASS	9738	181
197	COLUMBUS	OHIO	9731	335
198	SACRAMENTO	CAL	9715	37
199	OSHKOSH	WIS	9715	473
200	FITCHBURG	MASS	9692	184
201	NEW YORK CITY	NY	9682	303
202	MONTICELLO	MICH	9681	221
203	DANVILLE	ILL	9665	101
204	BATLE CREEK	MICH	9661	107
205	LENTON	PENN	9659	371
206	NEELAND	CONN	9627	60
207	DENVER	COLOR	9627	131
208	TOPEKA	KAN	9627	131
209	ALBUQUERQUE	NM	9641	283
210	OAKLAND	CAL	9626	29
211	ST. LOUIS	MO	9617	407
212	SPRINGFIELD	MASS	9612	202
213	ALTON	ILL	9600	93
214	DAYTON	OHIO	9600	337
215	CHEYENNE	WY	9599	480
216	SOVERVILLE	MASS	9594	201
217	ST. CLOUD	MINN	9591	229
218	NEW BRUNSWICK	NJ	9589	274
219	MARION	IND	9587	130
220	DISTRICT OF COLUMBIA	IND	9583	66
221	SALEM	ORE	9582	369
222	CHARLOTTE	NC	9564	317
223	MASSILLON	OHIO	9562	347
224	MANSFIELD	OHIO	9559	345
225	FORT DODGE	IOWA	9549	145
226	TACOMA	WASH	9537	453
227	HAMILTON	OHIO	9534	341
228	STOCKTON	CAL	9533	48
229	BURLINGTON	IOWA	9523	138
230	WICHITA	KAN	9523	155
231	MASON CITY	IOWA	9517	147
232	SANTA BARBARA	CAL	9514	45
233	ITAPACA	NY	9508	295
234	LAWRENCE	MASS	9507	188
235	NIAGARA FALLS	NY	9498	304
236	LOWELL	MASS	9495	189
237	MISHAWAKA	IND	9493	132
238	MANCHESTER	NH	9489	255
239	ORANGE	NJ	9481	276

RANK	CITY	STATE	FAMILY INCOME	PAGE	RANK	CITY	STATE	FAMILY INCOME	PAGE
240	WEST NEW YORK	NJ	9480	283	300	FRESNO	CAL	8971	22
241	GREAT FALLS	MT	9480	250	301	MARTIN	OHIO	8953	346
242	NASHVILLE	TENN	9473	413	302	OKLA	OKLA	8940	364
243	NARBERTON	OHIO	9455	330	303	ERIE	PENN	8927	376
244	MAUSAU	WIS	9449	477	304	BEAUMONT	TEX	8925	417
245	BELLINGHAM	WASH	9424	448	305	POCATTELLO	ID	8905	92
246	PERTH AMBOY	NJ	9413	279	306	PASSAIC	NJ	8904	277
247	AILINGS	MT	9403	248	307	EVANSVILLE	IND	8900	123
248	KOKOMO	IND	9397	128	308	CINCINNATI	OHIO	8894	332
249	HAMTRAMCK	MICH	9395	214	309	LEBANON	PENN	8889	381
250	PHILADELPHIA	PENN	9366	386	310	HIGH POINT	NC	8878	321
251	ALLIANCE	OHIO	9355	329	311	TYLER	TEX	8869	431
252	CANTON	OHIO	9343	331	312	AMARILLO	TEX	8867	415
253	STUEBENVILLE	OHIO	9342	356	313	QUINCY	ILL	8867	114
254	LIWA	OHIO	9337	343	314	LYNCHBURG	VA	8855	441
255	SIoux CITY	IOWA	9326	149	315	NEWARK	OHIO	8853	349
256	NEWPORT NEWS	VA	9325	442	316	OWENSBORO	KY	8852	161
257	RINGHAMTON	NY	9321	291	317	UNION CITY	NJ	8851	282
258	CHARLESTON	WV	9321	456	318	WINSTON-SALEM	NC	8834	325
259	SCHENECTADY	NY	9318	308	319	SALT LAKE CITY	UTAH	8817	436
260	DULUTH	MINN	9313	226	320	BALTIMORE	MD	8815	173
261	JERSEY CITY	NJ	9310	269	321	AMSTERDAM	NY	8807	289
262	WINONA	MINN	9283	231	322	BUFFALO	NY	8804	292
263	RICHMOND	IND	9280	135	323	PITTSBURGH	PENN	8800	387
264	FORT WORTH	TEX	9271	422	324	READING	PENN	8786	388
265	PONTOIAC	MI	9265	398	325	LITTLE ROCK	ARK	8786	12
266	COUNCIL BLUFFS	IOWA	9264	141	326	LEXINGTON	KY	8769	158
267	SYRACUSE	NY	9246	309	327	TUCSON	ARIZ	8759	9
268	WILKINSBURG	PENN	9237	593	328	MUNCIE	IND	8752	133
269	MURKIN	NY	9232	250	329	COMPTON	CAL	8729	281
270	CHRYSLER	MASS	9231	187	330	CRETON	KAN	8720	153
271	HAVER	MASS	9218	187	331	SICHLAND PARK	TEX	8716	215
272	EAST CHICAGO	IND	9208	121	332	PATTERSON	IND	8716	278
273	ODEN	UTAH	9193	424	333	TERRE HAUTE	IND	8679	137
274	ROME	NY	9185	307	334	RICHMOND	VA	8673	446
275	AUSTIN	TEX	9180	416	335	JACKSONVILLE	FLA	8673	70
276	KANSAS CITY	KAN	9165	152	336	MOONSOCKET	RI	8667	401
277	BATON ROUGE	LA	9151	164	337	OTTUMWA	IOWA	8663	148
278	SPOKANE	WASH	9137	452	338	SAN BERNARDINO	CAL	8658	38
279	BOSTON	MASS	9133	177	339	GAINESVILLE	FLA	8655	69
280	SPRINGFIELD	OHIO	9111	355	340	LANCASTER	PENN	8646	412
281	TROY	NY	9111	310	341	MEMPHIS	TENN	8635	380
282	MUSKEGON	MICH	9110	220	342	JAMESTOWN	NY	8624	296
283	GRAND FORKS	ND	9109	327	343	SUPERIOR	WIS	8618	476
284	HARTFORD	CONN	9108	55	344	NEW KENSINGTON	PENN	8613	384
285	CLEVELAND	OHIO	9107	333	345	MORGANTOWN	WV	8598	460
286	OKLAHOMA CITY	OKLA	9106	365	346	NEWPORT	RI	8592	397
287	LA CROSSE	WIS	9099	469	347	WHEELING	WV	8575	462
288	NEW ALBANY	IND	9099	134	348	YORK	PENN	8569	395
289	COLORADO SPRINGS	COLO	9090	50	349	MCKEESPORT	PENN	8566	382
290	NORWOOD	OHIO	9079	350	350	LOUISVILLE	KY	8564	159
291	YOUNGSTOWN	OHIO	9078	759	351	RAPID CITY	SD	8559	406
292	TALLAHASSEE	FLA	9078	79	352	PUEBLO	COLO	8553	52
293	NEW HAVEN	CONN	9031	59	353	PARKERSBURG	WV	8548	461
294	SHARON	PENN	9028	390	354	ALBUQUERQUE	NM	8545	370
295	ASHLAND	KY	9018	156	355	BLOOMINGTON	IND	8517	120
296	UTICA	NY	9008	311	356	CHESTER	PENN	8511	374
297	WATERTOWN	NY	8978	313	357	HUTCHINSON	KAN	8500	151
298	KINGSTON	NY	8974	297	358	SHREVEPORT	LA	8485	169
299	CHELSEA	MASS	8973	180	359				

(1969 MED. FAMILY INCOME CONT.)

1969 MED.
FAMILY
INCOME

RANK	CITY	STATE	PAGE	420	TUSCALOOSA	ALA	7839	7
360	YAKIMA	WASH	8480	455		TEX	7827	414
361	LURBOCK	TEX	8474	426		VA	7821	443
362	NORTH LITTLE ROCK	ARK	8472	13		MO	7820	242
363	CORPUS CHRISTI	TEX	8468	419		VA	7815	444
364	MONTGOMERY	ALA	8460	6		TEX	7809	430
365	PORTLAND	ME	8456	172		GA	7799	86
366	PROVIDENCE	RI	8430	399		NC	7796	316
367	HUNTINGTON PARK	CAL	8406	24		NJ	7786	267
368	EASTON	PENN	8401	375		MD	7782	174
369	ATLANTA	GA	8399	84		PENN	7757	391
370	WEST PALM BEACH	FLA	8382	81		NY	7748	301
371	SANTA FE	NM	8370	287		ALA	7737	3
372	HAZELTON	PENN	8359	378		TEX	7734	429
373	ELMIRA	NY	8353	293		OHIO	7705	352
374	ST. JOSEPH	MO	8328	244		KY	7686	160
375	ENID	OKLA	8323	361		FLA	7678	80
376	PENSACOLA	FLA	8319	77		ALA	7667	4
377	JACKSON	MISS	8299	235		NM	7620	286
378	LAKE CHARLES	LA	8297	166		TENN	7620	410
379	FALL RIVER	MASS	8289	183		SC	7612	403
380	PORTSMOUTH	VA	8280	445		KY	7612	162
381	SCRANTON	PENN	8273	389		TENN	7580	409
382	SPRINGFIELD	MO	8268	246		TEX	7575	428
383	DANVILLE	VA	8263	440		GA	7551	82
384	WILLIAMSPORT	PENN	8253	394		GA	7508	83
385	GREENVILLE	SC	8250	404		GA	7498	8
386	NEW BEDFORD	MASS	8230	194		OHIO	7440	300
387	ROANOKE	VA	8216	172		ARK	7406	4
388	HAGERSTOWN	MD	8215	405		NC	7368	319
389	ST. LOUIS	MO	8194	318		FLA	7308	78
390	DURHAM	NC	8194	408		FLA	7292	72
391	ST. LOUIS	MO	8182	248		OKLA	7259	362
392	HAPTSBURG	PENN	8176	377		UTAH	7167	435
393	LAKELAND	FLA	8174	72		GA	7143	90
394	BUTTE	MONT	8121	249		TENN	7114	408
395	MACON	GA	8104	88		FLA	7099	74
396	MOBILE	ALA	8095	5		MISS	7097	236
397	LAFALETTE	LA	8080	165		NC	6986	324
398	LEWISTON	ME	8065	171		OKLA	6931	1
399	WILMINGTON	DE	8050	65		FLA	6918	71
400	WILKES-BARRE	PENN	8047	392		FLA	6833	67
401	JOHNSTOWN	PENN	8046	379		MISS	6831	237
402	FAIRMONT	WV	8026	458		MISS	6737	232
403	BANGOR	ME	8014	170		MISS	6715	238
404	GALVESTON	TEX	8003	423		LA	6706	167
405	ROME	GA	7996	89		ILL	6654	103
406	ALTOONA	PENN	7979	372		ALA	6548	2
407	FORT SMITH	ARK	7975	10		ALA	6452	163
408	WICHITA FALLS	TEX	7972	433		LA	6395	257
409	EL PASO	TEX	7963	421		NJ	6308	233
410	HUNTINGTON	WV	7963	459		GA	6205	85
411	CAMDEN	NJ	7954	261		TEX	6030	11
412	NEW CASTLE	PENN	7949	383		LAREDO	4913	425
413	ORLANDO	FLA	7945	75				
414	CHARLESTON	SC	7920	402				
415	CLARKSBURG	WV	7910	457				
416	KNOXVILLE	TENN	7893	411				
417	WACO	TEX	7857	432				
418	ROCKY MOUNT	NC	7841	323				
419	PORT ARTHUR	TEX	7841	427				

CITIES RANKED BY 1950 MORTALITY RATIO-ALL CAUSES

(41)

RANK	CITY	STATE	1950 MORT.	RAT.	PAGE	RANK	CITY	STATE	1950 MOR. RAT.	PAGE
1	BUTTE	MONT	1.969	249		60	HARRISBURG	PENN	1.317	377
2	BAKERSFIELD	CAL	1.834	17		61	EUGENE	ORE	1.314	367
3	BROWNSVILLE	TEX	1.732	418		62	STUEBENVILLE	OHIO	1.313	356
4	TUCSON	ARIZ	1.618	9		63	WILMINGTON	DEL	1.309	65
5	JOHNSTOWN	PENN	1.606	379		64	RENO	NEV	1.307	253
6	MACON	GA	1.573	88		65	KNOXVILLE	TENN	1.307	411
7	AUGUSTA	GA	1.505	85		66	YORK	PENN	1.306	395
8	WASHINGTON	PENN	1.496	391		67	SACRAMENTO	CAL	1.306	37
9	GREENSBORO	NC	1.490	382		68	DANVILLE	VA	1.304	440
10	GREENVILLE	SC	1.489	404		69	GREENVILLE	MISS	1.302	233
11	PHOENIX	ARIZ	1.489	8		70	COVINGTON	LA	1.297	157
12	LAREDO	TEX	1.488	425		71	POUGHKEEPSIE	NY	1.297	305
13	VALLEJO	CAL	1.483	49		72	BALTIMORE	MD	1.295	258
14	HOBOKEN	NJ	1.478	267		73	PAIDMERE	WASH	1.295	435
15	TROY	NY	1.477	310		74	FALL RIVER	MASS	1.293	189
16	CHARLESTON	SC	1.471	402		75	CHICAGO	ILL	1.292	117
17	CHESTER	PENN	1.467	374		76	SPRINGFIELD	ILL	1.292	159
18	SAVANNAH	GA	1.453	90		77	LOUISVILLE	KY	1.292	83
19	SCRANTON	PENN	1.440	389		78	ATHENS	GA	1.290	173
20	SPARTANBURG	SC	1.433	405		79	BALTIMORE	MD	1.289	173
21	LACKAMANNA	NY	1.433	298		80	NEW KENSINGTON	PENN	1.283	384
22	COLUMBUS	GA	1.428	86		81	WINSTON-SALEM	NC	1.282	325
23	PETERSBURG	VA	1.421	444		82	NORFOLK	VA	1.282	443
24	NEWPORT NEWS	VA	1.405	442		83	MCKEESPORT	PENN	1.280	382
25	ANNISTON	ALA	1.401	1		84	AMSTERDAM	NY	1.278	289
26	ALBANY	NY	1.398	288		85	INDIANAPOLIS	IND	1.276	127
27	EASTON	PENN	1.397	375		86	PERTH AMBOY	NJ	1.274	279
28	BESSEMER	ALA	1.395	2		87	RICHMOND	VA	1.273	446
29	LEBANON	PENN	1.386	381		88	HAWTRAMCK	MICH	1.272	214
30	JOLIET	ILL	1.384	108		89	CUMBERLAND	MD	1.271	174
31	HOT SPRINGS	ARK	1.383	11		90	SAN ANTONIO	TEX	1.271	429
32	CHATTANOOGA	TENN	1.382	408		91	ATLANTA	GA	1.271	84
33	TAMPA	FLA	1.379	80		92	DANVILLE	ILL	1.268	101
34	STOCKTON	CAL	1.375	48		93	ALBANY	GA	1.266	82
35	PADUCAH	KY	1.375	162		94	CLARKSBURG	WV	1.265	457
36	EL PASO	TEX	1.368	421		95	HAZELTON	PENN	1.262	378
37	WILMINGTON	NC	1.366	324		96	HAMILTON	OHIO	1.261	341
38	EAST CHICAGO	IND	1.363	121		97	PHILADELPHIA	PENN	1.260	386
39	JERSEY CITY	NJ	1.362	269		98	SAN BERNARDINO	CAL	1.259	38
40	NEWPORT	KY	1.359	160		99	TERRE HAUTE	IND	1.256	137
41	NEWARK	NJ	1.356	310		100	MOONSOCKET	RI	1.254	401
42	EVANSTON	ILL	1.355	238		101	GARY	IND	1.253	125
43	EVANSTON	ILL	1.355	238		102	BUFFALO	NY	1.253	292
44	NASHVILLE	TENN	1.348	413		103	NEW BRUNSWICK	NJ	1.252	274
45	GALVESTON	TEX	1.344	423		104	NAYTON	OHIO	1.251	337
46	CHARLESTON	WV	1.342	456		105	ROCATTELLO	GA	1.251	92
47	NEWBURGH	NY	1.342	301		106	ROCATTELLO	GA	1.249	89
48	PARKERSBURG	WV	1.337	461		107	NEWPORT	RI	1.248	397
49	COLUMBIA	SC	1.333	403		108	HUNTINGTON	WV	1.248	459
50	NORTHAMPTON	MASS	1.331	196		109	NASHUA	NH	1.246	256
51	CAMDEN	NJ	1.331	261		110	LAUREL	MISS	1.246	236
52	JACKSONVILLE	FLA	1.329	70		111	ALEXANDRIA	LA	1.243	163
53	PITTSBURGH	PENN	1.327	387		112	LANCASTER	PENN	1.240	380
54	EAST ST. LOUIS	ILL	1.326	103		113	NEW ORLEANS	LA	1.239	168
55	SALEM	MASS	1.326	200		114	MARION	IND	1.239	130
56	PENSACOLA	FLA	1.325	77		115	HATTIESBURG	MISS	1.238	234
57	SANTA FE	NM	1.320	287		116	ALBUQUERQUE	NM	1.237	285
58	HAGERSTOWN	MD	1.318	175		117	PORTSMOUTH	VA	1.237	445
59	ATLANTIC CITY	NJ	1.317	257		118	ALBUQUERQUE	PENN	1.236	370
						119	ALBUQUERQUE	NM	1.233	286

RANK	CITY	STATE	1950 MORT.	RAT.	PAGE	(1950 MORTALITY RATIO CONT.)	RANK	CITY	STATE	1950 MORT.	RAT.	PAGE
120	PORT HURON	MICH	1.233	226	347		180	MASSILLON	OHIO	1.182		
121	FUBETT	WASH	1.233	450	95		181	BELLEVILLE	ILL	1.180		
122	ROCKY MOUNT	NC	1.232	323	220		182	MUSKOGEE	MICH	1.179		
123	OWENSBORO	KY	1.232	161	210		183	DETROIT	MICH	1.178		
124	SAN LEANORO	CAL	1.232	42	119		184	ANDERSON	IND	1.178		
125	FRESNO	CAL	1.230	22	5		185	MOBILE	ALA	1.177		
126	MONTGOMERY	ALA	1.229	6	373		186	BETHLEHEM	PENN	1.177		
127	BILLINGS	MONT	1.225	248	202		187	SPRINGFIELD	MASS	1.175		
128	NEW CASTLE	PENN	1.224	383	331		188	CANTON	OHIO	1.175		
129	BLOOMINGTON	ILL	1.224	97	118		189	WAUKEGAN	ILL	1.175		
130	NEW ALBANY	IND	1.223	134			190	PERIA	ILL	1.175		
131	MANCHESTER	NH	1.223	255	372		191	ALTOONA	PENN	1.174		
132	PAWTUCKET	RI	1.223	398	316		192	ASHEVILLE	NC	1.172		
133	BAY CITY	MICH	1.221	208	277		193	PASSAIC	NJ	1.171		
134	REVERE	MASS	1.221	199	345		194	MANFIELD	OHIO	1.170		
135	ELMIRA	NY	1.219	293	282		195	UNION CITY	NJ	1.170		
136	CLEVELAND	OHIO	1.219	333	278		196	PATTERSON	NJ	1.169		
137	TRENTON	NJ	1.218	281	211		197	FERNDALE	MICH	1.168		
138	WEST NEW YORK	NJ	1.218	283	330		198	BARTTON	OHIO	1.167		
139	ELIZABETH	NJ	1.217	264	207		199	BATTLE CREEK	MICH	1.167		
140	ST. LOUIS	MO	1.217	245	243		200	KANSAS CITY	MO	1.166		
141	CHELSEA	MASS	1.216	180	309		201	SYRACUSE	NY	1.166		
142	MONROE	LA	1.216	167	69		202	GAINSVILLE	FLA	1.161		
143	NEWARK	OHIO	1.215	349	140		203	CLINTON	IOWA	1.160		
144	MIDDLETOWN	OHIO	1.212	348	449		204	BREMERTON	WASH	1.159		
145	MERIDIAN	MISS	1.211	237	360		205	ZANESVILLE	OHIO	1.157		
146	PITTSFIELD	MASS	1.209	197	169		206	SHREVEPORT	LA	1.156		
147	KOKOMO	IND	1.209	128	55		207	NEW HAVEN	CONN	1.155		
148	SAN FRANCISCO	CAL	1.208	40	458		208	FAIRMONT	WY	1.155		
149	ROSTON	MASS	1.208	177	308		209	SCHENECTADY	NY	1.155		
150	SUPERIOR	WIS	1.208	476	201		210	SOMERVILLE	MASS	1.154		
151	ERIE	PENN	1.207	376	343		211	LIMA	OHIO	1.154		
152	TOLEDO	OHIO	1.206	357	124		212	FORT WAYNE	IND	1.154		
153	NEW YORK CITY	NY	1.206	303	156		213	ASHLAND	KY	1.153		
154	CHENNE	WY	1.206	480	133		214	MUNCIE	IND	1.153		
155	DURHAM	NC	1.201	144	438		215	ALEXANDRIA	VA	1.153		
156	QUINCY	ILL	1.201	317	166		216	FOND DU LAC	WIS	1.152		
157	REARLOTTE	NC	1.201	388	129		217	LAFAYETTE	LA	1.152		
158	YOUNGSTOWN	OHIO	1.200	359	313		218	DEMOOD CITY	CAL	1.151		
159	JACKSON	MS	1.199	216	313		219	SAUNDERS	IND	1.151		
160	KANSAS CITY	MO	1.199	171	353		220	GRAND RAPIDS	MI	1.150		
161	LEWISTON	ME	1.198	460	320		221	GREENSBORO	NC	1.150		
162	MORGANTOWN	WV	1.198	172	126		222	HAMMOND	IND	1.150		
163	QUINCY	ILL	1.197	114	3		223	BIRMINGHAM	ALA	1.149		
164	LORAIN	OHIO	1.197	344	3		224	PORTSMOUTH	OHIO	1.148		
165	DURHAM	NC	1.196	318	352		225	SPRINGFIELD	OHIO	1.148		
166	KEY WEST	FLA	1.196	71	355		226	NEW BEDFORD	MASS	1.147		
167	JOPLIN	MO	1.195	242	194		227	HEMPSTEAD	NY	1.145		
168	HOUSTON	TEX	1.194	424	294		228	WAIMATOSA	WIS	1.144		
169	LEXINGTON	KY	1.194	158	439		229	CHARLOTTEVILLE	VA	1.144		
170	WHEELING	WV	1.192	462	87		230	LA GRANGE	GA	1.144		
171	SEATTLE	WASH	1.192	451	53		231	BRIDGEPORT	CONN	1.144		
172	CORPUS CHRISTI	TEX	1.191	419	52		232	PUEBLO	COLO	1.143		
173	KINGSTON	NY	1.190	297	321		233	HIGH POINT	NC	1.143		
174	CINCINNATI	OHIO	1.189	332	312		234	VALLEY STREAM	NY	1.143		
175	WYANDOTTE	MICH	1.189	225	94		235	AURORA	ILL	1.142		
176	DISTRICT OF COLUMBIA		1.186	66	123		236	EVANSVILLE	IND	1.140		
177	BOISE	ID	1.185	91	116		237	ROCK ISLAND	ILL	1.140		
178	PROVIDENCE	RI	1.185	399	315		238	YONKERS	NY	1.139		
179	LAWRENCE	MASS	1.184	188	166		239	LAKE CHARLES	LA	1.138		

1950				1950				1950				1950			
RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE
240	COLORADO SPRINGS	COLO	1-138	300	GRAND RAPIDS	MICH	1-091	300	GRAND RAPIDS	MICH	1-091	300	GRAND RAPIDS	MICH	1-091
241	LYNN	MASS	1-137	301	ALLIANCE	OHIO	1-090	301	ALLIANCE	OHIO	1-090	301	ALLIANCE	OHIO	1-090
242	FALEIGH	NC	1-137	302	MARION	OHIO	1-089	302	MARION	OHIO	1-089	302	MARION	OHIO	1-089
243	WILWAUKEE	WIS	1-136	303	GRAND FORKS	ND	1-089	303	GRAND FORKS	ND	1-089	303	GRAND FORKS	ND	1-089
244	JACKSON	TENN	1-136	304	LITTLE ROCK	ARK	1-089	304	LITTLE ROCK	ARK	1-089	304	LITTLE ROCK	ARK	1-089
245	FORT WORTH	TEX	1-136	305	RICHMOND	CAL	1-088	305	RICHMOND	CAL	1-088	305	RICHMOND	CAL	1-088
246	GREAT FALLS	MONT	1-136	306	DAVENPORT	IOWA	1-088	306	DAVENPORT	IOWA	1-088	306	DAVENPORT	IOWA	1-088
247	RICHMOND	IND	1-136	307	OMAHA	NEB	1-086	307	OMAHA	NEB	1-086	307	OMAHA	NEB	1-086
248	HOLYOKE	MASS	1-136	308	WEST ORANGE	NJ	1-085	308	WEST ORANGE	NJ	1-085	308	WEST ORANGE	NJ	1-085
249	OTTUMWA	IOWA	1-135	309	MEMPHIS	TENN	1-085	309	MEMPHIS	TENN	1-085	309	MEMPHIS	TENN	1-085
250	FLINT	MICH	1-133	310	PANAMA CITY	FLA	1-085	310	PANAMA CITY	FLA	1-085	310	PANAMA CITY	FLA	1-085
251	AMARILLO	TEX	1-133	311	LAFAYETTE	LA	1-084	311	LAFAYETTE	LA	1-084	311	LAFAYETTE	LA	1-084
252	SAN JOSE	CAL	1-132	312	GRANITE CITY	ILL	1-084	312	GRANITE CITY	ILL	1-084	312	GRANITE CITY	ILL	1-084
253	LYNCHBURG	VA	1-131	313	ST. PAUL	MINN	1-083	313	ST. PAUL	MINN	1-083	313	ST. PAUL	MINN	1-083
254	BEAUMONT	TEX	1-129	314	DECATUR	ILL	1-083	314	DECATUR	ILL	1-083	314	DECATUR	ILL	1-083
255	TACOMA	WASH	1-127	315	DEARBORN	MICH	1-083	315	DEARBORN	MICH	1-083	315	DEARBORN	MICH	1-083
256	NIAGARA FALLS	NY	1-126	316	OAKLAND	CAL	1-083	316	OAKLAND	CAL	1-083	316	OAKLAND	CAL	1-083
257	ALTON	ILL	1-126	317	ROCKFORD	ILL	1-082	317	ROCKFORD	ILL	1-082	317	ROCKFORD	ILL	1-082
258	ORLANDO	FLA	1-125	318	MOLINE	ILL	1-081	318	MOLINE	ILL	1-081	318	MOLINE	ILL	1-081
259	WILLIAMSPORT	PENN	1-123	319	DES MOINES	IOWA	1-080	319	DES MOINES	IOWA	1-080	319	DES MOINES	IOWA	1-080
260	NEW LONDON	CONN	1-120	320	SALINA	KAN	1-080	320	SALINA	KAN	1-080	320	SALINA	KAN	1-080
261	SALESBURG	ILL	1-118	321	RINGHARTON	NY	1-080	321	RINGHARTON	NY	1-080	321	RINGHARTON	NY	1-080
262	SHARON	PENN	1-118	322	ST. CLOUD	MINN	1-078	322	ST. CLOUD	MINN	1-078	322	ST. CLOUD	MINN	1-078
263	PLAINFIELD	MASS	1-117	323	WYOMING	WY	1-076	323	WYOMING	WY	1-076	323	WYOMING	WY	1-076
264	CAMBRIDGE	MASS	1-117	324	DUETH	MINN	1-076	324	DUETH	MINN	1-076	324	DUETH	MINN	1-076
265	CICERO	ILL	1-115	325	LOS ANGELES	CAL	1-071	325	LOS ANGELES	CAL	1-071	325	LOS ANGELES	CAL	1-071
266	MALDEN	MASS	1-115	326	MUSKOGEE	OKLA	1-071	326	MUSKOGEE	OKLA	1-071	326	MUSKOGEE	OKLA	1-071
267	LOWELL	MASS	1-115	327	WARWICK	RI	1-070	327	WARWICK	RI	1-070	327	WARWICK	RI	1-070
268	MICHITA	KAN	1-111	328	ALBANY	PENN	1-069	328	ALBANY	PENN	1-069	328	ALBANY	PENN	1-069
269	ROANOKE	VA	1-110	329	PACINE	WIS	1-069	329	PACINE	WIS	1-069	329	PACINE	WIS	1-069
270	HARTFORD	CONN	1-109	330	PINE BLUFF	ARK	1-069	330	PINE BLUFF	ARK	1-069	330	PINE BLUFF	ARK	1-069
271	GLoucester	MASS	1-107	331	MAYNARD	ILL	1-068	331	MAYNARD	ILL	1-068	331	MAYNARD	ILL	1-068
272	MARGEN	WIS	1-106	332	LINDEN	NJ	1-067	332	LINDEN	NJ	1-067	332	LINDEN	NJ	1-067
273	STOUC CITY	OHIO	1-105	333	COUNCIL BLUFFS	IOWA	1-066	333	COUNCIL BLUFFS	IOWA	1-066	333	COUNCIL BLUFFS	IOWA	1-066
274	FITCHBURG	MASS	1-105	334	HAVERHILL	MASS	1-066	334	HAVERHILL	MASS	1-066	334	HAVERHILL	MASS	1-066
275	JACKSON	MISS	1-103	335	ALAMEDA	CAL	1-066	335	ALAMEDA	CAL	1-066	335	ALAMEDA	CAL	1-066
276	PORTLAND	ORE	1-102	336	TALLAHASSEE	FLA	1-065	336	TALLAHASSEE	FLA	1-065	336	TALLAHASSEE	FLA	1-065
277	KEARNY	NJ	1-102	337	SAN ANGELO	TEX	1-065	337	SAN ANGELO	TEX	1-065	337	SAN ANGELO	TEX	1-065
278	ROCHESTER	NY	1-101	338	BURLINGTON	IOWA	1-064	338	BURLINGTON	IOWA	1-064	338	BURLINGTON	IOWA	1-064
279	REMYN	IND	1-101	339	GREEN BAY	WIS	1-062	339	GREEN BAY	WIS	1-062	339	GREEN BAY	WIS	1-062
280	SOUTH BEND	IND	1-101	340	OSHKOSH	WIS	1-062	340	OSHKOSH	WIS	1-062	340	OSHKOSH	WIS	1-062
281	WORCESTER	MASS	1-101	341	RURLINGTON	VT	1-060	341	RURLINGTON	VT	1-060	341	RURLINGTON	VT	1-060
282	RIVERSIDE	CAL	1-101	342	SALT LAKE CITY	UTAH	1-060	342	SALT LAKE CITY	UTAH	1-060	342	SALT LAKE CITY	UTAH	1-060
283	HUTCHINSON	KAN	1-100	343	AKRON	OHIO	1-060	343	AKRON	OHIO	1-060	343	AKRON	OHIO	1-060
284	ORANGE	NJ	1-100	344	UTICA	NY	1-060	344	UTICA	NY	1-060	344	UTICA	NY	1-060
285	TULSA	OKLA	1-099	345	BROCKTON	MASS	1-060	345	BROCKTON	MASS	1-060	345	BROCKTON	MASS	1-060
286	QUINCY	MASS	1-099	346	LAKELAND	FLA	1-060	346	LAKELAND	FLA	1-060	346	LAKELAND	FLA	1-060
287	SAGINAW	MICH	1-097	347	NORWOOD	MASS	1-060	347	NORWOOD	MASS	1-060	347	NORWOOD	MASS	1-060
288	AUBURN	NY	1-097	348	MICHIGAN CITY	IND	1-058	348	MICHIGAN CITY	IND	1-058	348	MICHIGAN CITY	IND	1-058
289	WEST ELLIS	ILL	1-096	349	PORTLAND	ME	1-056	349	PORTLAND	ME	1-056	349	PORTLAND	ME	1-056
290	KANKAKEE	ILL	1-096	350	DALLAS	TEX	1-055	350	DALLAS	TEX	1-055	350	DALLAS	TEX	1-055
291	BANGOR	ME	1-095	351	SPokane	WASH	1-055	351	SPokane	WASH	1-055	351	SPokane	WASH	1-055
292	REDONDO BEACH	CAL	1-094	352	INGLEWOOD	CAL	1-054	352	INGLEWOOD	CAL	1-054	352	INGLEWOOD	CAL	1-054
293	COMPTON	CAL	1-093	353	DENVER	COLO	1-053	353	DENVER	COLO	1-053	353	DENVER	COLO	1-053
294	PORT ARTHUR	TEX	1-093	354	SAN BARRABA	CAL	1-053	354	SAN BARRABA	CAL	1-053	354	SAN BARRABA	CAL	1-053
295	ELYRIA	OHIO	1-092	355	BELTINGHAM	WASH	1-052	355	BELTINGHAM	WASH	1-052	355	BELTINGHAM	WASH	1-052
296	COLUMBUS	OHIO	1-091	356	BEVELVILLE	MO	1-051	356	BEVELVILLE	MO	1-051	356	BEVELVILLE	MO	1-051
297	SPRINGFIELD	MO	1-091	357	TOPEKA	KAN	1-051	357	TOPEKA	KAN	1-051	357	TOPEKA	KAN	1-051
298	WATERBURY	CONN	1-091	358	NORRISTOWN	PENN	1-051	358	NORRISTOWN	PENN	1-051	358	NORRISTOWN	PENN	1-051
299				359				359				359			

1950					(1950 MORTALITY RATIO CONT.)					1950							
RANK	CITY	STATE	MORT.	RAT.	PAGE	RANK	CITY	STATE	MORT.	RAT.	PAGE	RANK	CITY	STATE	MORT.	RAT.	PAGE
360	ELKHART	IND	1.050	122		420	WACO	TEX	0.982		432	420	WACO	TEX	0.982		432
361	MIAMI	FLA	1.050	73		421	WILKINSBURG	PENN	0.982		393	421	WILKINSBURG	PENN	0.982		393
362	BLOOMINGTON	IND	1.049	120		422	LAKEWOOD	OHIO	0.981		342	422	LAKEWOOD	OHIO	0.981		342
363	KALAMAZOO	MICH	1.047	217		423	STOUX FALLS	SD	0.981		407	423	STOUX FALLS	SD	0.981		407
364	SANTA MONICA	CAL	1.046	46		424	SOUTH GATE	CAL	0.981		47	424	SOUTH GATE	CAL	0.981		47
365	KENOSHA	WIS	1.045	468		425	HUNTINGTON PARK	CAL	0.976		24	425	HUNTINGTON PARK	CAL	0.976		24
366	MISHAWAKA	TND	1.043	132		426	RELIOTT	WIS	0.971		464	426	RELIOTT	WIS	0.971		464
367	GADSDEN	ALA	1.043	4		427	TYLER	TEX	0.971		431	427	TYLER	TEX	0.971		431
368	BATON ROUGE	LA	1.039	164		428	LANTON	OKLA	0.970		362	428	LANTON	OKLA	0.970		362
369	ST. JOSEPH	MO	1.039	244		429	EAST CLEVELAND	OHIO	0.970		338	429	EAST CLEVELAND	OHIO	0.970		338
370	HACKENSACK	NJ	1.038	266		430	SAN MATEO	CAL	0.970		43	430	SAN MATEO	CAL	0.970		43
371	LUBBOCK	TEX	1.036	426		431	STAMFORD	CONN	0.969		62	431	STAMFORD	CONN	0.969		62
372	ROCHESTER	MINN	1.035	228		432	MEDFORD	MASS	0.969		192	432	MEDFORD	MASS	0.969		192
373	OKLAHOMA CITY	OKLA	1.034	365		433	NEFTON	MASS	0.967		195	433	NEFTON	MASS	0.967		195
374	WEST PALM BEACH	FLA	1.033	81		434	PARMA	OHIO	0.967		351	434	PARMA	OHIO	0.967		351
375	LA CROSSE	WIS	1.032	469		435	CHICOPPEE	MASS	0.966		181	435	CHICOPPEE	MASS	0.966		181
376	ITHACA	NY	1.030	295		436	NORTH LITTLE ROCK	ARK	0.965		13	436	NORTH LITTLE ROCK	ARK	0.965		13
377	WICHITA FALLS	TEX	1.029	433		437	EULID	OHIO	0.964		340	437	EULID	OHIO	0.964		340
378	EAST ORANGE	NJ	1.029	263		438	IOWA CITY	IOWA	0.963		146	438	IOWA CITY	IOWA	0.963		146
379	MINNEAPOLIS	MINN	1.029	227		439	MASON CITY	IOWA	0.963		147	439	MASON CITY	IOWA	0.963		147
380	IRVINGTON	NJ	1.028	268		440	LINCOLN PARK	MICH	0.962		219	440	LINCOLN PARK	MICH	0.962		219
381	GARFIELD	NJ	1.026	265		441	TORRINGTON	CONN	0.960		63	441	TORRINGTON	CONN	0.960		63
382	OAK PARK	ILL	1.025	112		442	MANITOWOC	WIS	0.959		471	442	MANITOWOC	WIS	0.959		471
383	NEW BRITAIN	CONN	1.024	58		443	MOUNT VERNON	NY	0.957		300	443	MOUNT VERNON	NY	0.957		300
384	LANSING	MICH	1.023	218		444	LYNWOOD	CAL	0.956		28	444	LYNWOOD	CAL	0.956		28
385	MELROSE	MASS	1.021	193		445	LONG BEACH	CAL	0.956		26	445	LONG BEACH	CAL	0.956		26
386	FORT LAUDERDALE	FLA	1.021	68		446	EVANSTON	ILL	0.955		105	446	EVANSTON	ILL	0.955		105
387	TAUNTON	MASS	1.021	203		447	PURBANK	CAL	0.954		20	447	PURBANK	CAL	0.954		20
388	OGDEN	UTAH	1.021	434		448	WATERLOO	IOWA	0.953		150	448	WATERLOO	IOWA	0.953		150
389	WHITE PLAINS	NY	1.021	314		449	WINONA	MINN	0.953		231	449	WINONA	MINN	0.953		231
390	APPLETON	WIS	1.020	463		450	MERIDEN	CONN	0.951		56	450	MERIDEN	CONN	0.951		56
391	SANTA ANA	CAL	1.020	44		451	JOHNSON CITY	TENN	0.951		410	451	JOHNSON CITY	TENN	0.951		410
392	NUTLEY	NJ	1.020	275		452	BRISTOL	CONN	0.948		54	452	BRISTOL	CONN	0.948		54
393	FORT SMITH	ARK	1.020	10		453	UNIVERSITY CITY	MO	0.943		247	453	UNIVERSITY CITY	MO	0.943		247
394	SAN DIEGO	CAL	1.020	39		454	MONTCLAIR	NJ	0.942		272	454	MONTCLAIR	NJ	0.942		272
395	TUSCALOOSA	ALA	1.019	7		455	AUSTIN	WIS	0.936		470	455	AUSTIN	WIS	0.936		470
396	VANDOVER	WASH	1.019	454		456	MAISON	TEX	0.925		416	456	MAISON	TEX	0.925		416
397	FARGO	ND	1.018	326		457	TEMPLE	TEX	0.924		430	457	TEMPLE	TEX	0.924		430
398	RAPID CITY	SD	1.016	406		458	COLUMBIA	MO	0.916		239	458	COLUMBIA	MO	0.916		239
399	INDEPENDENCE	MO	1.015	240		459	EVERETT	WASH	0.915		182	459	EVERETT	WASH	0.915		182
400	NORWALK	CONN	1.014	61		460	BEVERLY	MASS	0.913		176	460	BEVERLY	MASS	0.913		176
401	CHICAGO	ILL	1.014	475		461	ALHAMBRA	CAL	0.906		16	461	ALHAMBRA	CAL	0.906		16
402	SHEBOYGAN	WIS	1.009	98		462	BERKELEY	CAL	0.905		18	462	BERKELEY	CAL	0.905		18
403	DAYTONA BEACH	FLA	1.008	67		463	CLEVELAND HEIGHTS	OHIO	0.902		334	463	CLEVELAND HEIGHTS	OHIO	0.902		334
404	ATLENE	TEX	1.008	414		464	ANN ARBOR	MICH	0.902		206	464	ANN ARBOR	MICH	0.902		206
405	END	OKLA	1.006	361		465	LINCOLN	NEB	0.898		251	465	LINCOLN	NEB	0.898		251
406	HIGHLAND PARK	CAL	1.004	215		466	GLENDALE	CAL	0.897		23	466	GLENDALE	CAL	0.897		23
407	POMONA	CAL	0.997	32		467	SALEM	ORE	0.897		369	467	SALEM	ORE	0.897		369
408	CEDAR RAPIDS	IOWA	0.996	139		468	PASADENA	CAL	0.892		31	468	PASADENA	CAL	0.892		31
409	ROYAL OAK	MICH	0.996	223		469	JEFFERSON CITY	MO	0.872		241	469	JEFFERSON CITY	MO	0.872		241
410	NEW ROCHELLE	NY	0.994	302		470	PALM ALTO	CAL	0.862		30	470	PALM ALTO	CAL	0.862		30
411	PONTIAC	MICH	0.994	221		471	ELGIN	ILL	0.838		104	471	ELGIN	ILL	0.838		104
412	CLIFTON	NJ	0.994	262		472	CONCORD	NH	0.815		254	472	CONCORD	NH	0.815		254
413	WALTHAM	MASS	0.993	204		473	ST. PETERSBURG	FLA	0.806		78	473	ST. PETERSBURG	FLA	0.806		78
414	BLOOMFIELD	NJ	0.993	260		474	SHAKER HEIGHTS	OHIO	0.790		354	474	SHAKER HEIGHTS	OHIO	0.790		354
415	CUYAHOGA FALLS	OHIO	0.993	336		475	CRANSTON	RI	0.778		396	475	CRANSTON	RI	0.778		396
416	RILOXI	MISS	0.992	232		476	PROVO	UTAH	0.762		435	476	PROVO	UTAH	0.762		435
417	EAO CLAIRE	WIS	0.986	465		477	NORMAN	OKLA	0.723		364	477	NORMAN	OKLA	0.723		364
418	FORT DODGE	IOWA	0.985	145		478	MIDDLETON	CONN	0.713		57	478	MIDDLETON	CONN	0.713		57
419	JAMESTOWN	NY	0.983	256		479	BEVERLY HILLS	CAL	0.695		19	479	BEVERLY HILLS	CAL	0.695		19

CITIES RANKED BY 1960 MORTALITY RATIO-ALL CAUSES

RANK	CITY	STATE	1960		(45)	RANK	CITY	STATE	1960	PAGE
			MORT.	BAT.						
1	BUTTE	MONT	1.564	249		60	DANVILLE	ILL	1.168	101
2	BOISE	ID	1.496	91		61	SAVANNAH	GA	1.167	90
3	JOHNSTOWN	PENN	1.477	379		62	CHICAGO	ILL	1.166	99
4	HAGERSTOWN	MD	1.400	175		63	HAMTRAMCK	MICH	1.166	214
5	NEWBURGH	NY	1.350	301		64	ERIE	PENN	1.165	376
6	WILKES-BARRE	PENN	1.345	392		65	ALTOONA	PENN	1.163	372
7	MACON	GA	1.344	88		66	ALBUQUERQUE	PENN	1.162	370
8	HOBOKEN	NJ	1.339	267		67	FLMIRA	NY	1.162	293
9	SCRANTON	PENN	1.338	389		68	WILMINGTON	DEL	1.162	65
10	CHARLESTON	SC	1.318	402		69	READING	PENN	1.161	388
11	WASHINGTON	PENN	1.303	391		70	JACKSONVILLE	FLA	1.160	70
12	RENO	NEV	1.296	253		71	TERRE HAUTE	IND	1.159	137
13	TROY	NY	1.287	310		72	BOSTON	MASS	1.159	177
14	CHESTER	PENN	1.285	374		73	MANSFIELD	OHIO	1.159	345
15	DAYTON	NJ	1.281	258		74	VALLEY STREAM	NY	1.155	312
16	AUGUSTA	GA	1.280	85		75	TRENTON	NJ	1.155	281
17	MCKEESPORT	PENN	1.269	382		76	POUGHKEEPSIE	NY	1.155	305
18	NEWPORT	KY	1.267	160		77	SACRAMENTO	CAL	1.154	37
19	NEWARK	NJ	1.265	273		78	BAY CITY	MICH	1.151	208
20	LANCASTER	PENN	1.262	509		79	NEW ORLEANS	LA	1.149	168
21	EAST ST. LOUIS	ILL	1.262	109		80	SCHENECTADY	NY	1.147	208
22	LEICESTER	MA	1.261	298		81	NEW CASTLE	PENN	1.147	383
23	LEICESTER	MA	1.260	581		82	COLUMBUS	GA	1.146	86
24	HARRISBURG	PENN	1.260	377		83	PROVIDENCE	RI	1.146	359
25	COVINGTON	KY	1.254	157		84	WHEELING	WV	1.143	462
26	PETERSBURG	VA	1.251	444		85	KEARNY	NJ	1.143	270
27	JERSEY CITY	NJ	1.250	269		86	LAWRENCE	MASS	1.142	188
28	EASTON	PENN	1.248	375		87	PHILADELPHIA	PENN	1.142	386
29	PITTSBURGH	PENN	1.247	387		88	ALBANY	NY	1.141	193
30	FAYETTEVILLE	NC	1.245	319		89	ALBANY	NY	1.141	193
31	WILMINGTON	NC	1.237	324		90	JOLIET	ILL	1.138	242
32	BAKERSFIELD	CAL	1.234	17		91	SPRINGFIELD	ILL	1.137	117
33	LOWELL	MASS	1.232	189		92	PORT HURON	MICH	1.136	222
34	UNION CITY	NJ	1.232	282		93	PATTERSON	NJ	1.136	278
35	HAZELTON	PENN	1.227	378		94	WINSTON-SALEM	NC	1.135	325
36	ALBANY	NY	1.221	288		95	OWENSBORO	KY	1.134	161
37	SANDUSKY	OHIO	1.219	353		96	LYNN	MASS	1.133	190
38	GREENVILLE	SC	1.216	404		97	LOUISVILLE	KY	1.132	159
39	ANDERSON	IND	1.210	119		98	EAST CHICAGO	IND	1.132	121
40	ANNISTON	ALA	1.209	1		99	KANSAS CITY	MO	1.132	109
41	POCATTELLO	ID	1.209	92		100	KEESWICK	ALA	1.132	2
42	CUMBERLAND	MD	1.209	174		101	WEST NEW YORK	NJ	1.131	283
43	CAMDEN	NJ	1.207	261		102	WYANDOTTE	MICH	1.129	225
44	CHELSEA	MASS	1.200	180		103	ROME	GA	1.129	89
45	BALTIMORE	MD	1.196	173		104	CLEVELAND	OHIO	1.128	533
46	SUPERIOR	WIS	1.193	476		105	NASHUA	NH	1.127	256
47	MASSILLON	OHIO	1.189	347		106	FALL RIVER	MASS	1.126	183
48	PERTH AMBOY	NJ	1.181	279		107	LEXINGTON	KY	1.125	158
49	GAINESVILLE	FLA	1.181	69		108	RICHMOND	VA	1.125	446
50	PAIDUCAH	KY	1.179	192		109	WATERTOWN	NY	1.124	313
51	PANAMA CITY	FLA	1.178	406		110	KANSAS CITY	KAN	1.124	152
52	CHATTANOOGA	TENN	1.178	408		111	VALLEJO	CAL	1.120	49
53	SPARTANBURG	SC	1.173	418		112	JOLIET	ILL	1.119	108
54	SPARTANBURG	SC	1.173	405		113	BATTLE CREEK	MICH	1.119	207
55	BUFFALO	NY	1.172	292		114	KNOXVILLE	TENN	1.119	411
56	STEUBENVILLE	OHIO	1.170	356		115	GALVESTON	TEX	1.117	423
57	YORKVILLE	PENN	1.169	395		116	PEORIA	ILL	1.117	113
58	NASHVILLE	TENN	1.168	413		117	GLOUCESTER	MASS	1.116	185
59	ELIZABETH	NJ	1.168	264		118	GREENVILLE	MASS	1.116	233
						119	AMSTERDAM	NY	1.115	289

(1960 MORTALITY RATIO-CONT.)										
RANK	CITY	STATE	MORT. RAT.	PAGE	RANK	CITY	STATE	MORT. RAT.	PAGE	
120	ALBUQUERQUE	NM	1-113	285	180	COLUMBIA	SC	1-079	403	
121	SALEM	MASS	1-113	200	181	AUBURN	MA	1-079	290	
122	SHEN	PENN	1-112	390	182	ATLANTA	GA	1-077	84	
123	GREAT FALLS	MONT	1-112	250	183	SOMERVILLE	MASS	1-076	201	
124	LIMA	OHIO	1-112	343	184	DURHAM	NC	1-076	318	
125	NEWPORT NEWS	VA	1-112	442	185	WARREN	OHIO	1-076	358	
126	ASHEVILLE	NC	1-111	316	186	NEW BEDFORD	MASS	1-075	352	
127	WILLIAMSPORT	PENN	1-110	394	187	CLARKSBURG	WV	1-071	457	
128	CHARLESTON	WV	1-110	456	188	CANTON	OHIO	1-070	331	
129	FITCHBURG	MASS	1-109	184	189	PARKERSBURG	WV	1-069	461	
130	LAFAYETTE	LA	1-108	165	190	GREEN BAY	WIS	1-068	467	
131	BRIDGEPORT	CONN	1-108	53	191	JACKSON	MICH	1-068	216	
132	MUNCIE	IND	1-107	133	192	BIRMINGHAM	ALA	1-068	3	
133	LA GRANGE	GA	1-106	87	193	CHARLOTTESVILLE	VA	1-067	439	
134	ST. LOUIS	MO	1-105	245	194	SAN FRANCISCO	CAL	1-065	40	
135	ORANGE	NJ	1-105	276	195	LINCOLN PARK	MICH	1-065	219	
136	NORFOLK	VA	1-104	443	196	KINGSTON	NY	1-064	297	
137	VANCOUVER	WASH	1-103	454	197	LINDEN	NJ	1-064	271	
138	MORGANTOWN	WV	1-102	460	198	EL PASO	TEX	1-064	421	
139	ALBANY	GA	1-102	82	199	WATERBURY	CONN	1-064	64	
140	ATHENS	GA	1-101	83	200	KCKCMC	TND	1-063	128	
141	LAFAYETTE	IND	1-101	125	201	TOLEDO	OHIO	1-063	357	
142	MANCHESTER	NH	1-101	255	202	MAUKEGAN	ILL	1-061	118	
143	DANVILLE	VA	1-100	440	203	EVERETT	MASS	1-061	182	
144	KEY WEST	FLA	1-099	71	204	ASHLAND	KY	1-061	156	
145	PENSACOLA	FLA	1-098	77	205	EVERETT	WASH	1-061	450	
146	NEW YORK CITY	NY	1-098	303	206	PASSAIC	NJ	1-060	277	
147	LEWISTON	ME	1-097	171	207	GREENSBORO	NC	1-059	320	
148	BROCKTON	MASS	1-097	178	208	ALLIANCE	OHIO	1-057	329	
149	PORTSMOUTH	VA	1-097	445	209	HAMILTON	OHIO	1-056	341	
150	RELIIT	WIS	1-096	464	210	PILOXI	MISS	1-056	232	
151	HATTIESBURG	MISS	1-096	234	211	MISHAMAKA	IND	1-054	132	
152	QUINCY	ILL	1-095	114	212	COLORADO SPRINGS	COLO	1-053	50	
153	HOT SPRINGS	ARK	1-094	11	213	BELLEVILLE	NJ	1-053	259	
154	BETHLEHEM	PENN	1-094	373	214	YOUNGSTOWN	OHIO	1-052	359	
155	WGNOCKET	RI	1-094	401	215	PITTSFIELD	MASS	1-052	197	
156	HEMPSTEAD	NY	1-094	294	216	CINCINNATI	OHIO	1-052	332	
157	VICKSBURG	MISS	1-094	238	217	CSHOSH	WIS	1-052	473	
158	COUNCIL BLUFF	IOWA	1-093	141	218	SPRINGFIELD	OHIO	1-051	355	
159	HARTFORD	CONN	1-091	55	219	DETROIT	MICH	1-051	210	
160	GARY	IND	1-090	125	220	DISTRICT OF COLUMBIA	DC	1-051	66	
161	INDIANAPOLIS	IND	1-089	127	221	LITTLE ROCK	ARK	1-049	12	
162	PORTLAND	ME	1-089	172	222	WONAKEE	VA	1-049	447	
163	ATLANTIC CITY	NJ	1-089	257	223	MILWAUKEE	WIS	1-049	472	
164	NEW BRUNSWICK	NJ	1-088	274	224	SPRINGFIELD	MASS	1-048	202	
165	HOLYOKE	MASS	1-088	187	225	OHAMA	NEB	1-047	252	
166	LAUREL	MISS	1-086	236	226	OKLAHOMA CITY	PENN	1-047	385	
167	MUSKOGON	MICH	1-086	220	227	OKLAHOMA CITY	PENN	1-046	384	
168	TACOMA	WASH	1-086	453	228	NEW KENSINGTON	VT	1-045	437	
169	ALBANY	PENN	1-085	371	229	LYNCHBURG	VA	1-045	441	
170	SYRACUSE	NY	1-085	309	230	SHREVEPORT	LA	1-045	169	
171	MONROE	LA	1-085	167	231	LAKE CHARLES	LA	1-044	160	
172	DAYTON	OHIO	1-084	337	232	CICERO	ILL	1-044	100	
173	MONTGOMERY	ALA	1-083	6	233	PANTRYCKET	RI	1-044	308	
174	YAKIMA	WASH	1-083	455	234	NUTLEY	NJ	1-044	275	
175	ITHACA	NY	1-082	295	235	MOLINE	ILL	1-043	111	
176	ROCKY MOUNT	NC	1-081	323	236	CAMBRIDGE	MASS	1-042	179	
177	ZANESVILLE	OHIO	1-081	360	237	REVERE	MASS	1-042	199	
178	NIAGARA FALLS	NY	1-080	304	238	PORTLAND	DRE	1-042	368	
179	BELLEVILLE	ILL	1-080	95	239	TULSA	OKLA	1-041	366	

(1960 MORTALITY RATIO-CONT.)

RANK	CITY	STATE	1960		RANK	CITY	STATE	1960	
			MORT.	RAT.				MORT.	RAT.
				(47)					
240	MARION	OHIO	1-041	346	300	ROCHESTER	NY	1-012	306
241	GRAND RAPIDS	MICH	1-041	213	301	SOUTH BEND	IND	1-011	136
242	JAMESTOWN	NY	1-041	296	302	NEWPORT	RI	1-009	397
243	COLUMBUS	OHIO	1-041	335	303	MEMPHIS	TENN	1-007	412
244	SAGINAW	MICH	1-040	224	304	PLAINFIELD	NJ	1-007	474
245	NEW HAVEN	CONN	1-040	59	305	DURHAM	NC	1-007	280
246	GRANITE CITY	ILL	1-040	107	306	Worcester	MASS	1-007	144
247	GAOSEN	ALA	1-039	4	307	ROCHESTER	MASS	1-007	205
248	TAMPA	FLA	1-039	80	308	DES MOINES	IOWA	1-005	143
249	TALLAHASSEE	FLA	1-039	79	309	SIOUX CITY	IOWA	1-005	149
250	TUCSON	ARIZ	1-038	9	310	BLOOMINGTON	IND	1-005	120
251	FRESNO	CAL	1-037	22	311	FORT WAYNE	IND	1-004	124
252	DEARBORN	MICH	1-037	209	312	SANTO DOMINGO	PR	1-001	150
253	LOCKPORT	NY	1-036	299	313	FORT WORTH	TEX	1-001	150
254	ROSWELL	NM	1-036	286	314	FORT WORTH	TEX	1-001	150
255	KANSAS CITY	MO	1-036	243	315	ALEXANDRIA	VA	1-001	452
256	WALDEN	MASS	1-036	181	316	ALBANY	NY	1-001	458
257	WATERBURY	MASS	1-036	181	317	UTICA	NY	1-001	458
258	BARNSTABLE	MASS	1-036	330	318	OKLAHOMA CITY	OKLA	1-001	311
259	BRIDGE	OHIO	1-036	330	319	HIGH POINT	NC	1-001	321
260	WHITE PLAINS	NY	1-033	314	320	YONKERS	NY	1-001	321
261	MERIDEN	CONN	1-033	56	321	BREMERTON	WASH	1-001	321
262	MICHIGAN CITY	IND	1-031	131	322	BEVERLY	MASS	1-001	321
263	WARWICK	RI	1-031	400	323	STAMFORD	CONN	1-001	176
264	RAPID CITY	SD	1-030	406	324	INGLEDWOOD	CAL	1-001	176
265	BATON ROUGE	LA	1-030	164	325	OGDEN	UTAH	1-001	25
266	NEW ALBANY	IND	1-029	349	326	MIDDLETOWN	OHIO	1-001	434
267	NEWARK	OHIO	1-029	268	327	MINNEAPOLIS	MINN	1-001	348
268	IRVINGTON	NJ	1-029	268	328	DENVER	COLO	1-001	227
269	STOCKTON	CAL	1-028	48	329	RICHMOND	CAL	1-001	51
270	HAMMOND	IND	1-027	126	330	DAVENPORT	IOWA	1-001	35
271	BINGHAMTON	NY	1-027	291	331	TORRINGTON	CONN	1-001	142
272	LAREDO	TEX	1-027	425	332	SPOKANE	WASH	1-001	63
273	REDWOOD CITY	CAL	1-026	34	333	WEST ELLIS	WIS	1-001	452
274	FERNDALE	MICH	1-023	211	334	WILMINGTON	DE	1-001	479
275	INDEPENDENCE	MO	1-023	240	335	ELMFIELD	IL	1-001	260
276	HUNTINGTON	WV	1-023	459	336	MINNA	MINN	1-001	231
277	CHARLOTTE	NC	1-022	317	337	ST. PAUL	MINN	1-001	230
278	FLINT	MICH	1-022	212	338	BELLINGHAM	WASH	1-001	192
279	MOBILE	ALA	1-022	5	339	SHEROYAN	TEX	1-001	448
280	RICHMOND	IND	1-022	135	340	CORPUS CHRISTI	TEX	1-001	475
281	DULUTH	MINN	1-021	226	341	EVANSVILLE	IND	1-001	419
282	MERIDIAN	MISS	1-021	237	342	SAN LEANDRO	CAL	1-001	123
283	ROME	NY	1-020	307	343	PIERSIDE	CAL	1-001	42
284	LORAIN	OHIO	1-020	344	344	ROCKFORD	ILL	1-001	36
285	BILLINGS	MONT	1-020	248	345	WATERLOO	ILL	1-001	113
286	BLOOMINGTON	ILL	1-020	97	346	WATERLOO	CONN	1-001	120
287	ROCK ISLAND	ILL	1-018	116	347	WATERLOO	CONN	1-001	120
288	ROCK ISLAND	ILL	1-017	468	348	WATERLOO	CONN	1-001	120
289	SEATTLE	WA	1-016	291	349	WATERLOO	CONN	1-001	120
290	SEATTLE	WA	1-016	291	350	WATERLOO	CONN	1-001	120
291	QUINCY	ILL	1-016	198	351	WATERLOO	CONN	1-001	120
292	REDONDO BEACH	CAL	1-015	33	352	WEST ORANGE	IND	1-001	58
293	SAN BERNARDINO	CAL	1-014	38	353	WEST ORANGE	IND	1-001	102
294	HACKENSACK	NJ	1-014	266	354	WEST ORANGE	IND	1-001	122
295	FOND DU LAC	WIS	1-013	466	355	PINE BLUFF	ARK	1-001	27
296	FAIRMONT	WV	1-013	458	356	FORT DODGE	IOWA	1-001	14
297	MIAMI	FLA	1-013	73	357	NORWOOD	OHIO	1-001	145
298	NEW LONDON	CONN	1-012	60	358	LA CROSSE	WIS	1-001	350
299	CLINTON	IOWA	1-012	140	359	EAST ORANGE	NJ	1-001	469
					359	ORLANDO	FLA	1-001	263
					359	LYNNWOOD	CAL	1-001	75
					359	LYNNWOOD	CAL	1-001	28

RANK	CITY	STATE	1960		PAGE	(1960 MORTALITY RATIO-CONT.)		RANK	CITY	STATE	1960	
			MORT.	RAT.		MORT.	RAT.					
1	ALAMEDA	CAL	0.969	15	420	MAYWOOD	ILL	0.912	110	44		
2	MUSKOGEE	OKLA	0.968	363	421	SANTA ANA	CAL	0.912	44	44		
3	PORTSMOUTH	OHIO	0.967	352	422	JACKSON	TENN	0.910	409	223		
4	BERNIN	ILL	0.967	96	423	ROYAL OAK	MICH	0.909	223	407		
5	SANTA MONICA	CAL	0.965	46	424	UNIVERSITY CITY	MO	0.908	247	351		
6	CHICOOPEE	MASS	0.965	181	425	STOUT FALLS	SD	0.907	407	471		
7	TAUNTON	MASS	0.965	203	426	MANITOWOC	WIS	0.907	471	351		
8	BEAUMONT	TEX	0.965	417	427	PARMA	OHIO	0.906	351	153		
9	APPLETON	WIS	0.962	463	428	SALINA	KAN	0.906	153	138		
10	OAKLAND	CAL	0.961	29	429	BURLINGTON	IOWA	0.905	20	235		
11	HUTCHINSON	KAN	0.961	151	430	ROCKFORD	ILL	0.904	20	235		
12	OTTUMWA	IOWA	0.961	148	431	JACKSON	MISS	0.904	235	61		
13	BANGOR	ME	0.961	170	432	LINCOLN	NEB	0.902	251	61		
14	ST. JOSEPH	MO	0.960	244	433	NORWALK	CONN	0.900	61	45		
15	LUBBOCK	TEX	0.958	426	434	SANTA BARBARA	CAL	0.900	45	139		
16	CHEYENNE	WY	0.957	480	435	CEDAR RAPIDS	IOWA	0.897	228	361		
17	HUNTINGTON PARK	CAL	0.957	24	436	ROCHESTER	MINN	0.897	361	430		
18	HOUSTON	TEX	0.956	424	437	ENID	OKLA	0.895	430	72		
19	WACO	TEX	0.956	432	438	TEMPLE	TEX	0.891	72	334		
20	CHAMPAIGN	ILL	0.955	98	439	LAKELAND	FLA	0.889	334	106		
21	TYLER	TEX	0.954	431	440	CLEVELAND HEIGHTS	OHIO	0.887	106	43		
22	OAK PARK	ILL	0.953	112	441	ALHAMBRA	CAL	0.887	43	67		
23	CUYAHOGA FALLS	OHIO	0.952	336	442	GALESBURG	ILL	0.882	67	252		
24	EAST CLARE	WIS	0.952	465	443	SAN MATEO	CAL	0.881	252	193		
25	FAST CLEVELAND	OHIO	0.951	338	444	DAYTONA BEACH	FLA	0.878	193	154		
26	SOUTH GATE	CAL	0.951	47	445	MONTCLAIR	NJ	0.876	154	8		
27	SAN JOSE	CAL	0.950	41	446	SHAKER HEIGHTS	OHIO	0.875	8	105		
28	AMARILLO	TEX	0.949	415	447	MELROSE	MASS	0.874	105	23		
29	ELYRIA	OHIO	0.947	339	448	TOPEKA	KAN	0.872	23	195		
30	WILKINSBURG	PENN	0.947	393	449	PHOENIX	ARIZ	0.869	195	206		
31	FORT LAUDERDALE	FLA	0.947	68	450	EVANSTON	ILL	0.867	206	147		
32	CLIFTON	NJ	0.945	262	451	GLENDALE	CAL	0.866	147	326		
33	BEVERLY HILLS	CAL	0.945	19	452	POMONA	CAL	0.866	326	31		
34	DALLAS	TEX	0.945	420	453	NEWTON	MASS	0.865	31	369		
35	MAUSAU	WIS	0.945	477	454	ANN ARBOR	MICH	0.865	369	146		
36	WALTHAM	MASS	0.945	204	455	MASON CITY	IOWA	0.864	146	478		
37	SPRINGFIELD	MO	0.943	246	456	JEFFERSON CITY	MO	0.864	478	433		
38	SAN ANGELO	TEX	0.942	428	457	FARGO	ND	0.858	433	367		
39	NORTH LITTLE ROCK	ARK	0.940	327	458	PASADENA	CAL	0.857	367	239		
40	SALT LAKE CITY	UTAH	0.940	13	459	SALE	ORE	0.856	239	52		
41	FORT SMITH	ARK	0.938	436	460	IOWA CITY	IOWA	0.854	52	416		
42	SANTA FE	NM	0.937	10	461	MAUMATA	WIS	0.854	416	229		
43	LONG BEACH	CAL	0.934	287	462	WICHITA FALLS	TEX	0.845	229	7		
44	ALTON	ILL	0.933	26	463	EUGENE	ORE	0.845	7	18		
45	JOHNSON CITY	ILL	0.932	93	464	COLUMBIA	MO	0.842	18	414		
46	HIGHLAND PARK	TENN	0.932	415	465	PUEBLO	COLO	0.842	414	30		
47	NEW ROCHESTER	MICH	0.931	215	466	AUSTIN	TEX	0.836	30	396		
48	SAN DIEGO	CAL	0.930	39	467	ST. CLOUD	MINN	0.836	396	435		
49	PORT ARTHUR	TX	0.930	302	468	TUSCALOOSA	ALA	0.829	435	196		
50	MOUNT VERNON	NY	0.930	427	469	BERKELEY	CAL	0.829	196	254		
51	LAKEWOOD	OHIO	0.928	300	470	ST. PETERSBURG	FLA	0.824	254	104		
52	EUCLED	OHIO	0.924	342	471	BERKELEY	FLA	0.813	104	74		
53	PONTIAC	OHIO	0.924	340	472	PALESTINE	TEX	0.813	74	364		
54	RALEIGH	MICH	0.924	221	473	PALO ALTO	TEX	0.812	364	364		
55	LAMTON	NC	0.922	322	474	CRANSTON	RI	0.808	364	435		
56	WEST PALM BEACH	OKLA	0.922	362	475	PROVO	UTAH	0.803	435	196		
57	KALAMAZOO	FLA	0.917	81	476	NORTHAMPTON	MASS	0.795	196	254		
58	COMPTON	MICH	0.917	217	477	CONCORD	NH	0.789	254	104		
59	MADISON	CAL	0.916	21	478	ELGIN	ILL	0.788	104	74		
60		WIS	0.913	470	479	MIAMI BEACH	FLA	0.773	74	364		
					480	MIDDLETOWN	CONN	0.722	364	364		
						NORMAN	OKLA	0.706				

CITIES RANKED BY 1970 MORTALITY RATIO-ALL CAUSES

CITIES RANKED BY 1970 MORTALITY RATIO-ALL CAUSES									
RANK		1970 MORT. RAT.		PAGE		RANK		CITY	
						</			

RANK	CITY	STATE	MORT.	RAT.	PAGE	RANK	CITY	STATE	MORT.	RAT.	PAGE
120	BAKERSFIELD	CAL	1.052	17		180	ATHENS	GA	1.010	83	
121	GARY	IND	1.051	125		181	AUBURN	ILL	1.010	94	
122	CICERO	ILL	1.050	100		182	BOISE	ID	1.010	51	
123	WATERLOO	NY	1.050	311		183	PORTLAND	ME	1.010	172	
124	WRENCHTON	TEX	1.050	421		184	MOBILE	ALA	1.009	5	
125	CALCEGE	TEX	1.049	421		185	PCATAC	WICH	1.009	221	
126	PHILADELPHIA	PENN	1.047	87		186	MACO	TEX	1.008	432	
127	HEMPSTEAD	NY	1.046	384		187	MAUKGAN	ILL	1.008	118	
128	YOUNGSTOWN	OHIO	1.046	294		188	CLINTON	IOHA	1.007	140	
129	ROSTON	MASS	1.044	359		189	NORFOLK	VA	1.007	443	
130	LAUREL	MISS	1.043	236		190	LINCOLN PARK	MICH	1.007	219	
131	SOMERVILLE	MASS	1.043	201		191	HUNTINGTON	WV	1.006	459	
132	WINSTON-SALEM	NC	1.043	325		192	TOLEDO	OHIO	1.005	357	
133	MERIDIAN	MISS	1.042	237		193	DETROIT	WICH	1.005	210	
134	MICHIGAN CITY	IND	1.042	131		194	ROCK ISLAND	ILL	1.004	116	
135	ORANGE	NJ	1.041	276		195	JACKSONVILLE	FLA	1.004	70	
136	MARION	OHIO	1.040	346		196	HARTFORD	CONN	1.003	55	
137	MONROE	LA	1.039	167		197	RELOT	WIS	1.003	464	
138	GRANITE CITY	ILL	1.039	107		198	DISTRICT OF COLUMBIA	MISS	1.002	66	
139	WYANDOTTE	MICH	1.038	225		199	FATTIESBURG	NM	1.002	234	
140	FAIRMONT	WV	1.038	458		200	ROSWELL	NM	1.001	286	
141	ALLIANCE	OHIO	1.037	329		201	KINGSTON	NY	1.000	297	
142	AMSTERDAM	NY	1.037	289		202	AUBURN	NY	1.000	290	
143	PORTSMOUTH	VA	1.035	445		203	LORAIN	OHIO	1.000	344	
144	BLOOMINGTON	IND	1.035	120		204	NASHUA	NH	1.000	256	
145	YAKIMA	WASH	1.034	455		205	WILLIAMSPORT	PENN	0.999	394	
146	CINCINNATI	OHIO	1.034	332		206	PROVIDENCE	RI	0.997	399	
147	TACOMA	WASH	1.031	453		207	CHARLOTTE	NC	0.996	317	
148	BLOOMINGTON	ILL	1.031	97		208	LAKELAND	FLA	0.994	72	
149	SAN LEANDRO	CAL	1.031	42		209	KANSAS CITY	KAN	0.993	152	
150	MUSKEGON	IND	1.030	135		210	JOLIET	ILL	0.993	108	
151	RENC	NEV	1.028	253		211	UNION CITY	NJ	0.993	282	
152	EVANSVILLE	IND	1.027	123		212	NEWPORT	RI	0.991	397	
153	OMENSBORO	MASS	1.026	187		213	VALLEJO	CAL	0.991	45	
154	HOLYOKE	MASS	1.026	187		214	FALL RIVER	MASS	0.991	183	
155	TUCSON	ARIZ	1.025	9		215	NEW ALBANY	IND	0.990	134	
156	COLUMBUS	GA	1.023	86		216	LYNCHBURG	VA	0.990	441	
157	RICHMOND	OHIO	1.023	446		217	DANVILLE	VA	0.989	440	
158	HAMILTON	OHIO	1.022	341		218	LEBANON	PENN	0.988	381	
159	ALBUQUERQUE	NM	1.021	370		219	MIAMI	FLA	0.987	73	
160	ST. JOSEPH	MO	1.019	244		220	ALTON	ILL	0.987	93	
161	FLYNTAC	OHIO	1.019	339		221	LAFALETTE	IND	0.987	129	
162	HARTFORD	MASS	1.018	214		222	NEW BEDFORD	MASS	0.986	194	
163	LAWRENCE	MASS	1.018	188		223	NAGARA FALLS	NY	0.986	304	
164	COLUMBUS	OHIO	1.018	335		224	MALDEN BEACH	MASS	0.985	181	
165	SALEM	MASS	1.016	353		225	WESTPORT	MASS	0.985	171	
166	NEWARK	DELA	1.014	353		226	BEVERLY	MASS	0.982	259	
167	NEWARK	DELA	1.014	353		227	GLANSVILLE	FLA	0.981	69	
168	NEWARK	DELA	1.014	353		228	HAMMOND	IND	0.981	126	
169	NEWARK	DELA	1.014	353		229	PERLIN	ILL	0.980	113	
170	NEWARK	DELA	1.014	353		230	REWOOD CITY	CAL	0.980	34	
171	NEWARK	DELA	1.014	353		231	ALBANY	IND	0.979	119	
172	NEWARK	DELA	1.014	353		232	ALBANY	IND	0.979	82	
173	NEWARK	DELA	1.014	353		233	ALBANY	IND	0.978	82	
174	NEWARK	DELA	1.014	353		234	NEW YORK CITY	NY	0.977	303	
175	NEWARK	DELA	1.014	353		235	ORLANDO	FLA	0.976	75	
176	NEWARK	DELA	1.014	353		236	HOUSTON	TEX	0.975	424	
177	NEWARK	DELA	1.014	353		237	CORPUS CHRISTI	TEX	0.974	419	
178	NEWARK	DELA	1.014	353		238	ITHACA	NY	0.973	295	
179	NEWARK	DELA	1.014	353		239	FORT WORTH	TEX	0.973	422	

RANK	CITY	STATE	1970		PAGE	RANK	CITY	STATE	1970		PAGE
			MORT.	RAT.					MORT.	RAT.	
240	EVERETT	WASH	0.973	450		300	HIGHLAND PARK	MICH	0.939	215	
241	SAN ANGEL	TEX	0.972	428		301	BEAUMONT	TEX	0.938	417	
242	SOUTH BEND	IND	0.972	136		302	LANTON	OKLA	0.938	362	
243	SAN BERNARDINO	CAL	0.971	278		303	VALLEY STREAM	NY	0.937	312	
244	PATTERSON	NJ	0.971	278		304	SAN JOSE	CAL	0.936	41	
245	OKLAHOMA CITY	OKLA	0.970	365		305	DAYTONA BEACH	FLA	0.936	67	
246	NORWOOD	OHIO	0.970	350		306	COLORADO SPRINGS	COLO	0.936	50	
247	MOLINE	ILL	0.970	111		307	PHOENIX	ARIZ	0.936	8	
248	SPRINGFIELD	MASS	0.969	202		308	RANGCP	ME	0.935	170	
249	LINDEN	NJ	0.969	271		309	GLOUCESTER	MASS	0.935	185	
250	MASON CITY	IOWA	0.968	147		310	SANTA FE	NM	0.934	287	
251	BRACKTON	MASS	0.968	178		311	MORGANTOWN	WV	0.934	460	
252	CHARLOTTESVILLE	VA	0.967	435		312	MUSKOGEE	OKLA	0.933	363	
253	DURHAM	NC	0.966	318		313	PITTSFIELD	MASS	0.933	197	
254	LAFAYETTE	LA	0.965	165		314	DURBUQUE	IOWA	0.933	144	
255	FORT WAYNE	IND	0.965	124		315	SALEM	MASS	0.932	200	
256	SHEVEPORT	LA	0.964	169		316	OGDEN	UTAH	0.932	434	
257	PUEBLO	COLO	0.964	52		317	ROCHESTER	NY	0.932	306	
258	JACKSON	MISS	0.964	235		318	PORT ARTHUR	TEX	0.932	427	
259	DES MOINES	IOWA	0.963	143		319	EL PASO	TEX	0.932	421	
260	FLINT	MICH	0.963	212		320	LYNN	MASS	0.931	190	
261	PAWTUCKET	RI	0.962	398		321	FOND DU LAC	WIS	0.930	466	
262	CHEYENNE	WY	0.962	480		322	SOUTH GATE	CAL	0.929	47	
263	UTICA	NY	0.961	311		323	REXWYN	ILL	0.928	96	
264	NEW LONDON	CONN	0.961	60		324	ASHLAND	KY	0.927	156	
265	ELIZABETH	NJ	0.959	264		325	ROSE	NY	0.927	307	
266	IRVINGTON	NJ	0.958	268		326	HACKENSACK	NJ	0.926	266	
267	NEW KENSINGTON	PENN	0.958	384		327	WORCESTER	MASS	0.926	205	
268	GRAND RAPIDS	MICH	0.957	213		328	OTTUMWA	IOWA	0.926	148	
269	BRIDGEPORT	CONN	0.957	53		329	NEAPORT NEWS	VA	0.925	442	
270	KANSAS CITY	MO	0.956	243		330	BURLINGTON	VT	0.924	437	
271	FITCHBURG	MASS	0.955	184		331	MIDDLETOWN	OHIO	0.924	348	
272	SPOKANE	WASH	0.953	452		332	DAVENPORT	IOWA	0.923	142	
273	KNOWVILLE	TENN	0.953	411		333	CAMBRIDGE	MASS	0.922	179	
274	BROWNSVILLE	TEX	0.952	418		334	DEARBORN	MICH	0.921	209	
275	AKRON	OHIO	0.952	328		335	JACKSON	TENN	0.921	409	
276	ALLENTOWN	PENN	0.952	371		336	MILWAUKEE	WIS	0.921	452	
277	DALLAS	TEX	0.952	420		337	SEATTLE	WASH	0.920	451	
278	BINGHAMTON	NY	0.950	291		338	TALLAHASSEE	FLA	0.920	79	
279	BETHLEHEM	PENN	0.950	373		339	BILLCXI	MISS	0.920	232	
280	AMARILLO	TEX	0.949	415		340	CHICPEE	MASS	0.919	181	
281	STOCKTON	CAL	0.948	48		341	SAN ANTONIO	TEX	0.919	429	
282	FERNDALE	MICH	0.947	211		342	OSHKOSH	WIS	0.918	473	
283	SAN FRANCISCO	CAL	0.947	40		343	GARFIELD	NJ	0.918	265	
284	SHERBOYGAN	WIS	0.946	475		344	MARION	IND	0.917	130	
285	HAUSAU	WIS	0.946	477		345	LANSING	MICH	0.917	218	
286	HIGH POINT	NC	0.945	321		346	WATERBURY	CONN	0.917	64	
287	KANKAKEE	ILL	0.945	109		347	RACINE	WIS	0.916	474	
288	COUNCIL BLUFFS	IOWA	0.944	141		348	EUCID	OHIO	0.915	340	
289	PORTLAND	ORE	0.944	368		349	KENOSHA	WIS	0.915	468	
290	MEMPHIS	TENN	0.944	412		350	OMAHA	NEB	0.915	252	
291	GREAT FALLS	MONT	0.944	250		351	LAKE CHARLES	LA	0.915	166	
292	JAMESTOWN	NY	0.943	296		352	ROCKFORD	ILL	0.914	115	
293	JOHNSON CITY	TENN	0.943	410		353	LURBOCK	TEX	0.913	426	
294	NASHVILLE	TENN	0.942	413		354	RAYWOOD	ILL	0.912	110	
295	POCATTELLO	ID	0.942	92		355	ALDOWFIELD	NJ	0.911	260	
296	REVERE	MASS	0.940	199		356	WHITE PLAINS	NY	0.911	314	
297	GREENSBORO	NC	0.940	320		357	WICHITA	KAN	0.910	155	
298	BELLINGHAM	WASH	0.939	448		358	LOS ANGELES	CAL	0.910	51	
299	NEW HAVEN	CONN	0.939	59		359	DENVER	COLO	0.907	51	

				1970				1970				(1970 MORTALITY RATIO-CONT.)							
				MORT. RAT.				MORT. RAT.				RANK				CITY			
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RANK	CITY	STATE	1950 MORT.	RAT.	PAGE	RANK	CITY	STATE	1950 MORT.	RAT.	PAGE
1	BUTTE	MONT	1.813	249	53	60	MONROE	LA	1.311	167	53
2	AUGUSTA	GA	1.763	85		61	SACRAMENTO	CAL	1.307	37	
3	TRUY	NY	1.618	310		62	ALBUQUERQUE	PENN	1.304	370	
4	SAVANNAH	GA	1.595	90		63	REDWOOD CITY	CAL	1.302	34	
5	MACON	GA	1.573	88		64	FALL RIVER	MASS	1.300	183	
6	SPARTANBURG	SC	1.572	405		65	STAMFORD	GA	1.299	82	
7	HOBOKEN	NJ	1.570	267		66	STAMFORD	CT	1.299	446	
8	JOHNSTON	PENN	1.563	379		67	MONTGOMERY	ALA	1.296	274	
9	PETERSBURG	VA	1.521	444		68	NEW BRUNSWICK	NJ	1.293	317	
10	ALBANY	NY	1.501	288		69	CHARLOTTE	NC	1.292	217	
11	EASTON	PENN	1.500	375		70	PHILADELPHIA	PENN	1.292	386	
12	BAKERSFIELD	CAL	1.500	117		71	INDIANAPOLIS	IND	1.291	127	
13	PALESTINE	ILL	1.498	310		72	EAST CHICAGO	IND	1.290	121	
14	GREENVILLE	PENN	1.492	374		73	QUINCY	ILL	1.290	114	
15	ATLANTA	GA	1.486	404		74	MANCHESTER	NH	1.289	255	
16	ATLANTA	GA	1.478	83		75	CHELSEA	MASS	1.287	180	
17	COLUMBUS	GA	1.476	86		76	WCONSOCKET	RI	1.285	401	
18	WASHINGTON	PENN	1.464	391		77	HIGH POINT	NC	1.282	321	
19	ROCKY MOUNT	NC	1.455	323		78	BUFFALO	NY	1.282	292	
20	NEWBURGH	NY	1.446	301		79	OWENSBORO	KY	1.279	161	
21	WILKES-BARRE	PENN	1.435	392		80	STUEBENVILLE	OHIO	1.279	356	
22	LEBANON	PENN	1.429	381		81	PERTH AMBOY	NJ	1.277	279	
23	SCRANTON	PENN	1.417	389		82	ALTOONA	PENN	1.276	372	
24	BAYONNE	NJ	1.415	258		83	NEWMPT	RI	1.275	397	
25	COLUMBIA	SC	1.410	403		84	NEW ORLEANS	LA	1.272	168	
26	WINSTON-SALEM	NC	1.399	325		85	COVINGTON	KY	1.271	157	
27	NEWARK	NJ	1.398	273		86	YAKIMA	WA	1.269	455	
28	CAMDEN	NJ	1.394	261		87	DANVILLE	VA	1.268	440	
29	NORFOLK	VA	1.394	443		88	LOUISVILLE	KY	1.266	318	
30	HARRISBURG	PENN	1.390	377		89	DURHAM	NC	1.264	439	
31	NEWPORT NEWS	VA	1.389	442		90	PANLUCKET	RI	1.264	398	
32	PAIDUACH	KY	1.389	162		91	CHARLOTTESVILLE	VA	1.264	439	
33	WILMINGTON	NC	1.389	324		92	LANRENCE	MASS	1.261	188	
34	CUMBERLAND	MD	1.387	174		93	KNOXVILLE	TENN	1.257	411	
35	GALVESTON	TEX	1.377	423		94	CHAITANODGA	TENN	1.255	408	
36	YORK	PENN	1.377	395		95	ELIZABETH	NJ	1.255	264	
37	VALLEJO	CAL	1.377	49		96	MARTIN	IND	1.255	130	
38	PORTSMOUTH	VA	1.375	445		97	SAN LEANDRO	CAL	1.254	42	
39	NASHUA	NH	1.374	256		98	ELMIRA	NY	1.252	293	
40	WEST NEW YORK	NJ	1.372	283		99	SPRINGFIELD	ILL	1.248	457	
41	HAGERSTOWN	MD	1.372	175		100	EVERETT	WA	1.248	234	
42	LACKAWANNA	NY	1.371	298		101	UNION CITY	WASH	1.238	334	
43	BESSEMER	ALA	1.368	196		102	UNION CITY	NJ	1.237	582	
44	NORTHAMPTON	MASS	1.362	266		103	GREENSBORO	NC	1.236	520	
45	JERSEY CITY	NJ	1.357	426		104	STOCKTON	CAL	1.236	48	
46	CHARLESTON	SC	1.357	402		105	SYRACUSE	NY	1.234	309	
47	REVEREND	ILL	1.352	95		106	MOBILE	ALA	1.232	5	
48	BALTIMORE	MD	1.349	199		107	SALEM	MASS	1.230	200	
49	EAST ST. LOUIS	ILL	1.341	173		108	LANCASTER	PENN	1.228	380	
50	MCKEESPORT	PENN	1.337	103		109	TAMPA	FLA	1.228	80	
51	VALLEY STREAM	NY	1.335	382		110	TUCSON	ARIZ	1.226	9	
52	ANNISTON	ALA	1.333	312		111	BETHLEHEM	PENN	1.225	373	
53	PITTSBURGH	PENN	1.323	1		112	NEW YORK CITY	NY	1.225	303	
54	DANVILLE	ILL	1.320	387		113	AMSTERDAM	NY	1.224	289	
55	DANVILLE	ILL	1.317	101		114	NEWMPT	KY	1.223	160	
56	ATLANTIC CITY	NJ	1.317	257		115	SUPERIOR	WIS	1.223	476	
57	JOLIET	ILL	1.316	108		116	WAUNATOSA	WIS	1.222	478	
58	FERNDALE	MICH	1.314	211		117	PENSACOLA	FLA	1.222	77	
59	VICKSBURG	MISS	1.312	238		118	READING	PENN	1.221	388	
						119	GLOUCESTER	MASS	1.221	185	

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			MORT.	RAT.		(54)	MORT.				RAT.		
120	PITTSFIELD	MASS	1.220	197	197			180	KANSAS CITY	KAN	1.157	152	152
121	GREENVILLE	MISS	1.220	233				181	BATON ROUGE	LA	1.157	164	
122	HOLYOKE	MASS	1.220	187	341			182	WILLIAMSPORT	PENN	1.156	394	394
123	HAMILTON	OHIO	1.219	341				183	RENO	NEV	1.156	315	
124	HOT SPRINGS	ARK	1.216	11	53			184	YONKERS	NY	1.156	190	190
125	BRIDGEPORT	CONN	1.212	53				185	LYNN	MASS	1.154	123	
126	BLOOMINGTON	ILL	1.210	97	69			186	EVANSVILLE	IND	1.154	100	100
127	GAINSVILLE	FLA	1.209	69				187	CICERO	ILL	1.154	466	
128	GALESBURG	ILL	1.206	106	202			188	FOND DU LAC	WIS	1.154	21	60
129	SPRINGFIELD	MASS	1.206	202				189	CHARLESTON	WV	1.154	456	
130	NEW KENSINGTON	PENN	1.205	384	87			190	NEW LONDON	CONN	1.152	60	21
131	LA GRANGE	GA	1.205	87				191	COMPTON	CAL	1.152	21	
132	DAYTON	OHIO	1.204	337	281			192	LOVELL	MASS	1.151	189	89
133	TRENTON	OHIO	1.204	281				193	ROME	GA	1.151	89	
134	ERIE	PENN	1.202	376	194			194	LAFAYETTE	IND	1.151	129	313
135	NEW BEDFORD	PENN	1.202	194				195	WATERTOWN	NY	1.151	177	
136	BERWYN	ILL	1.201	96	316			196	BOSTON	MASS	1.150	306	306
137	SAN FRANCISCO	CAL	1.197	40				197	ROCHESTER	NY	1.148	207	
138	ASHEVILLE	NC	1.197	316	236			198	BATTLE CREEK	MICH	1.147	191	191
139	LAUREL	MISS	1.194	236				199	MALDEN	MASS	1.147	128	
140	MASSILLON	OHIO	1.194	347	367			200	KOKOMO	IND	1.145	128	94
141	EUGENE	ORE	1.194	367				201	LEXINGTON	KY	1.143	210	
142	DISTRICT OF COLUMBIA	MASS	1.194	66	201			202	AURORA	ILL	1.142	460	210
143	SOMERVILLE	MASS	1.193	201				203	MORGANTOWN	WV	1.142	280	
144	ST. LOUIS	MO	1.192	245	308			204	DETROIT	MICH	1.138	295	205
145	SCHENECTADY	NY	1.191	308				205	ITHACA	NY	1.138	371	
146	NEW ALBANY	IND	1.191	134	59			206	WORCESTER	MASS	1.137	205	479
147	NEW HAVEN	CONN	1.190	59				207	ALLENSTOWN	PENN	1.137	277	
148	LEWISTON	ME	1.189	171	148	ORLANDO	FLA	1.137	75	3			
149	OTTUMWA	IOWA	1.189	148	290			208	WEST ELLIS		WIS	1.135	479
150	AUBURN	NY	1.188	290				210	PLAINFIELD	NJ	1.134	280	225
151	PARKERSBURG	WV	1.187	461	349			211	MYANDOTTE	MICH	1.133	225	
152	NEWARK	OHIO	1.185	349				212	MERIDIAN	MISS	1.132	237	277
153	PATTERSON	NJ	1.185	278	413			213	RALEIGH	NC	1.131	322	
154	NASHVILLE	TENN	1.183	413				214	PASSAIC	NJ	1.128	277	12
155	MILWAUKEE	WIS	1.181	472	41			215	WAUKEGAN	ILL	1.126	118	
156	SAN JOSE	CAL	1.180	41				216	BIRMINGHAM	ALA	1.126	3	55
157	TERRE HAUTE	IND	1.180	137	140			217	LITTLE ROCK	ARK	1.122	12	
158	CLINTON	IOWA	1.179	140				218	HARTFORD	CONN	1.121	55	208
159	DUBUQUE	IOWA	1.178	144	15			219	NIAGARA FALLS	NY	1.120	304	
160	ALAMEDA	CAL	1.178	144				220	BAY CITY	MICH	1.120	208	95
161	KINGSTON	NY	1.178	297	330			221	SEATTLE	WASH	1.120	451	
162	BARTON	OHIO	1.178	330				222	BELLEVIEW	ILL	1.119	95	449
163	ROME	NY	1.177	307	126			223	KEARNY	NJ	1.118	270	
164	HAMOND	IND	1.176	126				224	BREMERTON	WASH	1.118	449	169
165	CLEVELAND	OHIO	1.175	333	214			225	ROANOKE	VA	1.118	447	
166	HARTFORD	MICH	1.171	214				226	SHREVEPORT	LA	1.117	169	242
167	JACKSONVILLE	FLA	1.171	70	462			227	FITCHBURG	MASS	1.116	184	
168	WHEELING	WV	1.170	462				228	JOPLIN	MO	1.116	242	124
169	CLARKSBURG	WV	1.167	457	119			229	SPRINGFIELD	OHIO	1.116	355	
170	ANDERSON	IND	1.167	119				230	NUTLEY	NJ	1.115	275	138
171	NEW CASTLE	PENN	1.167	383	399			231	FORT WAYNE	IND	1.114	124	
172	PROVIDENCE	RI	1.166	399				232	BURLINGTON	IOWA	1.114	138	33
173	HAZELTON	PENN	1.165	378	441			233	LYNWOOD	CAL	1.114	28	
174	LYNCHBURG	VA	1.165	441				234	MAYWOOD	ILL	1.113	110	91
175	GARY	IND	1.165	125	359			235	REDONDO BEACH	CAL	1.112	33	
176	YOUNGSTOWN	OHIO	1.160	359				236	LAKE CHARLES	LA	1.112	166	110
177	TOLEDO	OHIO	1.159	357	278			237	BOISE	ID	1.111	91	
178	ORANGE	NJ	1.159	278				238	PEORIA	ILL	1.111	113	110
179	MIDDLETOWN	OHIO	1.157	348	239	ALTON	ILL	1.110	93				

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MORT. RAT.				RANK				MORT. RAT.			
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PAGE				RANK				PAGE			
240	JACKSON	MICH	1-110	216	300	SANDUSKY	OHIO	1-065	353		
241	OAKLAND	CAL	1-110	29	301	DEARBORN	MICH	1-065	209		
242	UTICA	NY	1-110	311	302	LAKELAND	FLA	1-065	72		
243	CINCINNATI	OHIO	1-110	332	303	WARWICK	RI	1-063	400		
244	BELLEVILLE	NJ	1-110	259	304	CANTON	OHIO	1-062	331		
245	LOCKPORT	NY	1-109	299	305	KANKAKEE	ILL	1-062	109		
246	HUTCHINSON	KAN	1-108	151	306	FORT WORTH	TEX	1-061	422		
247	PORT HURON	MICH	1-107	222	307	FARGO	ND	1-061	326		
248	GARFIELD	NJ	1-106	265	308	BINGHAMTON	NY	1-059	291		
249	MAUSAU	WIS	1-106	477	309	GRAND RAPIDS	MICH	1-059	213		
250	FRESNO	CAL	1-106	22	310	OMAHA	NEB	1-052	252		
251	COUNCIL BLUFFS	IOWA	1-105	141	311	KENOSHA	WIS	1-051	468		
252	SOUTH GATE	CAL	1-105	47	312	CUYAHOGA FALLS	OHIO	1-051	336		
253	HOUSTON	TEX	1-105	424	313	WHITE PLAINS	NY	1-049	314		
254	ROCK ISLAND	ILL	1-103	116	314	AKRON	OHIO	1-047	328		
255	TACOMA	WASH	1-102	453	315	BELOIT	WIS	1-047	464		
256	RICHMOND	CAL	1-100	35	316	DECATUR	ILL	1-047	102		
257	LA CROSSE	WIS	1-099	469	317	RICHMOND	IND	1-045	135		
258	EUCLID	OHIO	1-099	340	318	WEST PALM BEACH	FLA	1-045	81		
259	SANTA MONICA	CAL	1-098	46	319	COLUMBUS	OHIO	1-044	335		
260	HUNTINGTON	WV	1-097	459	320	SAN BERNARDINO	CAL	1-043	38		
261	ZANESVILLE	OHIO	1-094	360	321	ST. LOUIS	IOWA	1-042	149		
262	KANSAS CITY	MO	1-094	243	322	ALEXANDRIA	LA	1-042	163		
263	OAK PARK	ILL	1-094	112	323	KALAMAZOO	MICH	1-042	217		
264	PINE BLUFF	ARK	1-094	14	324	TUSCALOOSA	ALA	1-042	7		
265	BILLINGS	MONT	1-093	248	325	MOLINE	ILL	1-041	111		
266	LINDEN	NJ	1-091	271	326	HACKENSACK	NJ	1-041	266		
267	QUINCY	MASS	1-090	198	327	SHARON	PENN	1-040	390		
268	PHOENIX	ARIZ	1-089	8	328	DAVENPORT	IOWA	1-040	142		
269	GRANITE CITY	ILL	1-088	107	329	SAN MATEO	CAL	1-039	43		
270	CHICOPEE	MASS	1-087	181	330	BROOKSVILLE	TEX	1-038	418		
271	PORT ARTHUR	TEX	1-087	427	331	SPOKANE	WASH	1-037	452		
272	POCAHONTAS	ID	1-086	92	332	LORAIN	OHIO	1-035	344		
273	MUSKOGEE	MICH	1-085	220	333	COLORADO SPRINGS	COLO	1-035	50		
274	BROCKTON	MASS	1-084	178	334	APPLETON	WIS	1-034	463		
275	WATERBURY	CONN	1-083	64	335	ST. PAUL	MINN	1-032	230		
276	NORWOOD	OHIO	1-083	350	336	BLOOMINGTON	IND	1-028	120		
277	HAVERTHILL	MASS	1-082	186	337	ST. JOSEPH	MO	1-028	244		
278	CHEYENNE	WY	1-081	480	338	BANGOR	ME	1-027	170		
279	SOUTH BEND	IND	1-079	136	339	SHEBOYGAN	WIS	1-027	475		
280	FLINT	MICH	1-079	212	340	PORTSMOUTH	OHIO	1-026	352		
281	DULUTH	MINN	1-077	226	341	ELYRIA	OHIO	1-026	339		
282	BURLINGTON	VT	1-074	437	342	MASON CITY	IOWA	1-024	147		
283	RACINE	WIS	1-073	474	343	PORTLAND	ME	1-023	172		
284	ROYAL OAK	MICH	1-073	223	344	ASHLAND	NY	1-022	156		
285	TOPEKA	KAN	1-073	154	345	JACKSON	MISS	1-021	235		
286	LOS ANGELES	CAL	1-072	27	346	JACKSON	TENN	1-021	409		
287	IRVINGTON	NJ	1-072	268	347	PARMA	OHIO	1-020	351		
288	SAGINAW	MICH	1-071	224	348	ROCKFORD	ILL	1-020	415		
289	MUNCIE	IND	1-070	133	349	EL PASO	TEX	1-019	421		
290	TALLAHASSEE	FLA	1-068	79	350	DES MOINES	IOWA	1-017	161		
291	WICHITA	KAN	1-068	155	351	EAST ORANGE	NJ	1-016	263		
292	MANFIELD	OHIO	1-068	345	352	TAMPA	FLA	1-014	203		
293	PORTLAND	ORE	1-068	368	353	BEAUMONT	TEX	1-014	420		
294	WILKINSBURG	PENN	1-068	353	354	ALHAMBRA	TEX	1-013	417		
295	WARREN	OHIO	1-067	358	355	BLOOMFIELD	CAL	1-013	16		
296	SPRINGFIELD	MO	1-067	246	356	NORRISTOWN	NJ	1-011	260		
297	LANSING	MICH	1-067	218	357	BLOOMFIELD	PENN	1-011	385		
298	INGLEWOOD	CAL	1-067	125	358	ROSWELL	NM	1-010	286		
299	LIMA	OHIO	1-066	343	359	TULSA	OKLA	1-010	366		

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RANK		CITY	STATE	MORT. RAT.		PAGE	
MORT.				RAT.		PAGE	
(56)							
360	1-010	MELROSE	MASS	193			
361	1-009	MARION	OHIO	346			
362	1-008	EAU CLAIRE	WIS	465			
363	1-007	MEMPHIS	TENN	412			
364	1-007	WATERLOO	IOWA	190			
365	1-007	MEDFORD	MASS	192			
366	1-005	RIVERSIDE	CAL	36			
367	1-003	CHAMPAIGN	ILL	98			
368	1-003	CLIFTON	NJ	262			
369	1-003	WALTHAM	MASS	204			
370	1-003	MINNEAPOLIS	MINN	227			
371	1-003	SALT LAKE CITY	UTAH	436			
372	1-002	NEW ROCHELLE	NY	302			
373	1-002	LAFAYETTE	LA	165			
374	1-001	UNIVERSITY CITY	MO	247			
375	1-001	LAKEWOOD	OHIO	342			
376	0-999	FAIRMONT	WV	498			
377	0-999	LINCOLN PARK	MICH	219			
378	0-998	NORWALK	CONN	61			
379	0-997	ODEN	UTAH	434			
380	0-996	TYLER	TEX	431			
381	0-996	SIOUX FALLS	SD	407			
382	0-996	MICHIGAN CITY	IND	131			
383	0-995	OSHKOSH	WIS	473			
384	0-994	JAMESTOWN	NY	296			
385	0-994	PUEBLO	COLO	52			
386	0-990	HUNTINGTON PARK	CAL	24			
387	0-988	SANTA BARBARA	CAL	45			
388	0-986	GREAT FALLS	MONT	250			
389	0-986	MUSKOGEE	OKLA	363			
390	0-983	BELLINGHAM	WASH	448			
391	0-983	GREEN BAY	WIS	467			
392	0-983	ENID	OKLA	361			
393	0-983	LONG BEACH	CAL	26			
394	0-982	CORPUS CHRISTI	TEX	419			
395	0-981	EVANSTON	ILL	105			
396	0-980	SANTA ANA	CAL	44			
397	0-978	SAN ANTONIO	TEX	429			
398	0-975	ELKHART	IND	122			
399	0-974	SAN DIEGO	CAL	39			
400	0-972	CEDAR RAPIDS	IOWA	139			
401	0-972	BERKELEY	CAL	18			
402	0-971	ALBUQUERQUE	NM	285			
403	0-970	RAPID CITY	SD	406			
404	0-970	EAST CLEVELAND	OHIO	338			
405	0-969	FORT SMITH	ARK	10			
406	0-967	DAYTONA BEACH	FLA	67			
407	0-966	BURBANK	CAL	20			
408	0-966	WICHITA FALLS	TEX	433			
409	0-965	MOUNT VERNON	NY	300			
410	0-964	TORRINGTON	CONN	63			
411	0-963	NEW BRITAIN	CONN	58			
412	0-962	NEWTON	MASS	195			
413	0-961	HIGHLAND PARK	MICH	215			
414	0-960	MISHAWAKA	IND	132			
415	0-960	MIAMI	FLA	73			
416	0-960	MANITOWOC	WIS	471			
417	0-959	OKLAHOMA CITY	OKLA	365			
418	0-959	MERIDEN	CONN	56			
419	0-959	BEVERLY	MASS	176			

CITIES RANKED BY 1960 MORTALITY RATIO-CARDIOVASCULAR RENAL DISEASES

CITIES RANKED BY 1960 MORTALITY RATIO-CARDIOVASCULAR RENAL DISEASES				(57)		1960		MORT. RAT.		1960		MORT. RAT.		PAGE	
RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE
1	JOHNSTOWN	PENN	1-559	379	60	NEW CASTLE	PENN	60	NEW CASTLE	PENN	1-198	383			
2	BUTLER	PENN	1-486	249	61	BUFFALO	NY	61	BUFFALO	NY	1-198	292			
3	HAGERSTOWN	MD	1-466	175	62	PHILADELPHIA	PENN	62	PHILADELPHIA	PENN	1-197	386			
4	ROCKFORD	ILL	1-442	267	63	PORT HURON	MICH	63	PORT HURON	MICH	1-197	222			
5	BOYKNE	NJ	1-440	258	64	DURHAM	NC	64	DURHAM	NC	1-195	318			
6	SCRANTON	PENN	1-416	389	65	YORK	PENN	65	YORK	PENN	1-193	395			
7	EAST ST. LOUIS	ILL	1-416	103	66	COVINGTON	KY	66	COVINGTON	KY	1-191	157			
8	MACON	GA	1-413	88	67	JOLIET	ILL	67	JOLIET	ILL	1-188	108			
9	NEWBURGH	NY	1-397	301	68	VALLEY STREAM	NY	68	VALLEY STREAM	NY	1-188	312			
10	BOISE	ID	1-392	91	69	WINSTON-SALEM	NC	69	WINSTON-SALEM	NC	1-186	325			
11	TRCY	NY	1-362	310	70	BELLEVILLE	NJ	70	BELLEVILLE	NJ	1-185	259			
12	LEBANON	PENN	1-353	381	71	ROME	NY	71	ROME	NY	1-184	307			
13	WASHINGTON	PENN	1-341	391	72	LINDEN	NJ	72	LINDEN	NJ	1-183	271			
14	AUGUSTA	GA	1-333	85	73	DANVILLE	ILL	73	DANVILLE	ILL	1-182	101			
15	CUMBERLAND	MD	1-332	174	74	WHEELING	WV	74	WHEELING	WV	1-182	462			
16	CAMDEN	NJ	1-332	261	75	ERIE	PENN	75	ERIE	PENN	1-181	376			
17	LANCASTER	PENN	1-328	380	76	FALL RIVER	MASS	76	FALL RIVER	MASS	1-178	183			
18	MASSILLON	OHIO	1-323	347	77	WICOMSOCKET	RI	77	WICOMSOCKET	RI	1-178	401			
19	PETERSBURG	VA	1-322	444	78	NEWPORT NEWS	VA	78	NEWPORT NEWS	VA	1-176	442			
20	NEWARK	NJ	1-317	273	79	NORFOLK	VA	79	NORFOLK	VA	1-176	443			
21	SAVANNAH	GA	1-315	90	80	WILMINGTON	NC	80	WILMINGTON	NC	1-176	364			
22	SAVANNAH	GA	1-315	90	81	CHESEA	MASS	81	CHESEA	MASS	1-176	364			
23	CHESTER	PENN	1-307	374	82	MAYFIELD	OH	82	MAYFIELD	OH	1-174	380			
24	LACKAWANNA	PENN	1-298	298	83	CANTERMORE	NY	83	CANTERMORE	NY	1-172	395			
25	ALBANY	NY	1-296	288	84	LAURENCE	MASS	84	LAURENCE	MASS	1-167	289			
26	PADUCAH	KY	1-292	162	85	PARKERSBURG	WV	85	PARKERSBURG	WV	1-165	461			
27	WILKES-BARRE	PENN	1-291	392	86	EAST CHICAGO	IND	86	EAST CHICAGO	IND	1-165	121			
28	LOWELL	MASS	1-281	189	87	NEW KENSINGTON	PENN	87	NEW KENSINGTON	PENN	1-164	384			
29	CHICAGO	ILL	1-270	99	88	AUBURN	NY	88	AUBURN	NY	1-163	290			
30	ANDERSON	IND	1-268	119	89	PROVIDENCE	RI	89	PROVIDENCE	RI	1-162	399			
31	UNION CITY	NJ	1-268	282	90	TRENTON	NJ	90	TRENTON	NJ	1-162	281			
32	GLOUCESTER	MASS	1-267	185	91	BESSEMER	ALA	91	BESSEMER	ALA	1-162	2			
33	RENO	NEV	1-257	253	92	PATTERSON	NJ	92	PATTERSON	NJ	1-161	278			
34	ITHACA	NY	1-257	253	93	FAYETTEVILLE	NC	93	FAYETTEVILLE	NC	1-161	319			
35	JERSEY CITY	NJ	1-255	263	94	SPRINGFIELD	ILL	94	SPRINGFIELD	ILL	1-159	117			
36	SPARTANBURG	SC	1-250	263	95	GALVESTON	TEX	95	GALVESTON	TEX	1-159	423			
37	SPRINGFIELD	MA	1-250	405	96	ALBANY	GA	96	ALBANY	GA	1-158	82			
38	PERTAMBOY	PENN	1-249	387	97	COUNCIL BLUFFS	IOWA	97	COUNCIL BLUFFS	IOWA	1-156	141			
39	SPRINGFIELD	MA	1-249	279	98	KANKAKEE	ILL	98	KANKAKEE	ILL	1-156	109			
40	SCHENECTADY	NY	1-247	86	99	AURORA	ILL	99	AURORA	ILL	1-155	94			
41	ELIZABETH	NJ	1-244	264	100	RICHMOND	VA	100	RICHMOND	VA	1-155	446			
42	HARRISBURG	PENN	1-241	377	101	NUTLEY	NJ	101	NUTLEY	NJ	1-155	275			
43	ELMIRA	NY	1-238	293	102	MANCHESTER	NH	102	MANCHESTER	NH	1-155	255			
44	BALTIMORE	MD	1-232	173	103	TERRE HAUTE	IND	103	TERRE HAUTE	IND	1-154	137			
45	MCKEESPORT	PENN	1-230	382	104	NEW ORLEANS	LA	104	NEW ORLEANS	LA	1-152	168			
46	SUPERIOR	WIS	1-229	476	105	ALEXANDRIA	LA	105	ALEXANDRIA	LA	1-149	163			
47	STEUERENVILLE	OHIO	1-228	356	106	HAMTRAMCK	MICH	106	HAMTRAMCK	MICH	1-149	214			
48	SANDUSKY	OHIO	1-224	353	107	ALLENTON	PENN	107	ALLENTON	PENN	1-148	371			
49	ALQUIPPA	PENN	1-222	370	108	SYRACUSE	NY	108	SYRACUSE	NY	1-147	309			
50	READING	PENN	1-222	388	109	GARY	IND	109	GARY	IND	1-147	125			
51	HAZELTON	PENN	1-221	378	110	ASHEVILLE	NC	110	ASHEVILLE	NC	1-145	316			
52	KEARNY	NJ	1-218	270	111	NASHUA	NH	111	NASHUA	NH	1-144	256			
53	PORTSMOUTH	VA	1-214	445	112	WATERTOWN	NY	112	WATERTOWN	NY	1-144	313			
54	GREENVILLE	SC	1-213	404	113	POCATTELLO	ID	113	POCATTELLO	ID	1-142	92			
55	WEST NEW YORK	NJ	1-210	283	114	PEORIA	ILL	114	PEORIA	ILL	1-141	113			
56	NASHVILLE	TENN	1-208	413	115	COLUMBIA	SC	115	COLUMBIA	SC	1-141	405			
57	NEWPORT	KY	1-206	160	116	MOBILE	ALA	116	MOBILE	ALA	1-140	5			
58	LA GRANGE	PENN	1-205	372	117	WARWICK	RI	117	WARWICK	RI	1-137	129			
59	LA GRANGE	GA	1-201	87	118	LAFAYETTE	IND	118	LAFAYETTE	IND	1-137	129			
59	LA GRANGE	GA	1-201	87	119	CICERO	ILL	119	CICERO	ILL	1-136	100			

1960 MORT. RAT. (58) (1960 MORTALITY RATIO-CONT.)												
RANK	CITY	STATE	1960 MORT.	RAT.	PAGE	RANK	CITY	STATE	1960 MORT.	RAT.	PAGE	
120	LEXINGTON	KY	1.135	158		180	NEW BEDFORD	MASS	1.094	194		
121	BATTLE CREEK	MICH	1.134	207		181	REVERE	MASS	1.093	199		
122	ROCKY MOUNT	NC	1.134	323		182	LYNN	MASS	1.093	190		
123	EVERETT	WASH	1.133	450		183	NEWPORT	RI	1.093	397		
124	BELOIT	WIS	1.132	464		184	SOMERVILLE	MASS	1.090	201		
125	ATLANTIC CITY	NJ	1.132	257		185	CLARKSBURG	WV	1.090	457		
126	MUSKOGEE	MICH	1.132	220		186	HAMILTON	OHIO	1.089	341		
127	GAINESVILLE	FLA	1.132	65		187	SACRAMENTO	CAL	1.089	37		
128	JAMESTOWN	NY	1.131	296		188	TOLEDO	OHIO	1.086	357		
129	ORANGE	NJ	1.131	276		189	ZANESVILLE	OHIO	1.086	360		
130	MYANDOTTE	MICH	1.130	225		190	MISHAWAKA	IND	1.084	132		
131	BAY CITY	MICH	1.130	208		191	RICHMOND	IND	1.084	135		
132	PENSACOLA	FLA	1.129	77		192	CANTON	OHIO	1.083	331		
133	WOLINE	ILL	1.129	111		193	IRVINGTON	NJ	1.083	268		
134	LEWISTON	ME	1.127	171		194	YAKIMA	WASH	1.082	455		
135	MARION	OHIO	1.127	346		195	PASSAIC	NJ	1.082	277		
136	DAYTON	OHIO	1.127	337		196	PORTLAND	ME	1.082	172		
137	MORGANTOWN	WV	1.127	460		197	INDIANAPOLIS	IND	1.082	127		
138	ATHENS	GA	1.124	83		198	VANCOUVER	WASH	1.081	454		
139	BRIDGEPORT	CONN	1.123	53		199	ANNISTON	ALA	1.080	1		
140	QUINCY	ILL	1.123	114		200	ST. LOUIS	MO	1.079	245		
141	GREENSBORO	NC	1.123	320		201	HIGH POINT	NC	1.079	321		
142	JOPLIN	MO	1.121	242		202	NIAGARA FALLS	NY	1.078	304		
143	BATON ROUGE	LA	1.121	164		203	ROCK ISLAND	ILL	1.078	116		
144	VALLEJO	CAL	1.120	49		204	LIMA	OHIO	1.077	343		
145	MONROE	LA	1.120	167		205	GREEN BAY	WIS	1.076	467		
146	LOUISVILLE	KY	1.120	159		206	SALEM	MASS	1.076	200		
147	BELLEVILLE	ILL	1.119	95		207	NEW BRUNSWICK	NJ	1.075	274		
148	EVERETT	MASS	1.119	182		208	HERIDEN	CONN	1.075	56		
149	CHARLESTON	WV	1.118	456		209	SAGINAW	MICH	1.073	224		
150	ROME	GA	1.116	89		210	UTICA	NY	1.073	311		
151	OWENSBORO	KY	1.115	161		211	PINE BLUFF	ARK	1.069	14		
152	BETHLEHEM	PENN	1.115	373		212	BLOOMINGTON	ILL	1.068	97		
153	ALLIANCE	OHIO	1.113	329		213	MILWAUKEE	WIS	1.067	472		
154	KOKOMO	IND	1.113	128		214	FLINT	MICH	1.066	212		
155	BIRMINGHAM	ALA	1.110	3		215	RACINE	WIS	1.064	474		
156	LYNCHBURG	VA	1.109	441		216	MORRISTOWN	PENN	1.064	585		
157	NEW YORK CITY	NY	1.108	307		217	MUNCIE	IND	1.062	133		
158	GRANITE CITY	ILL	1.107	187		218	MICHIGAN CITY	IND	1.062	131		
159	KANSAS CITY	KAN	1.107	152		219	NEW HAVEN	CONN	1.061	89		
160	CHARLESTON	SC	1.105	402		220	CHICAGO	ILL	1.061	181		
161	FITCHBURG	MASS	1.104	186		221	CHARLOTTE	VA	1.061	43		
162	MARGEN	OHIO	1.101	358		222	LOCKPORT	NY	1.059	299		
163	HOLYOKE	MASS	1.101	187		223	PANAMA CITY	FLA	1.056	76		
164	OSHKOSH	WIS	1.101	473		224	HAMMOND	IND	1.056	126		
165	DANVILLE	VA	1.100	440		225	HAVERHILL	MASS	1.054	186		
166	MAUKGAN	ILL	1.099	118		226	LYNWOOD	CAL	1.054	28		
167	BOSTON	MASS	1.099	177		227	KEY WEST	FLA	1.053	71		
168	CLEVELAND	OHIO	1.098	333		228	BLOOMINGTON	IND	1.053	120		
169	PAWTUCKET	RI	1.098	398		229	ROCHESTER	NY	1.053	306		
170	WILLIAMSPORT	PENN	1.098	394		230	DETROIT	MICH	1.052	210		
171	GARFIELD	NJ	1.097	265		231	FAIRMONT	WV	1.051	458		
172	SHARON	PENN	1.097	390		232	CHICPEE	MASS	1.051	181		
173	KINGSTON	NY	1.096	297		233	LAKE CHARLES	LA	1.051	166		
174	CHARLOTTE	NC	1.096	317		234	PLAINFIELD	NJ	1.050	280		
175	NEW ALBANY	IND	1.096	134		235	HARTFORD	CONN	1.049	55		
176	JACKSONVILLE	FLA	1.096	70		236	WATERBURY	CONN	1.047	64		
177	BRCKTON	MASS	1.096	178		237	BLOOMFIELD	NJ	1.047	260		
178	MONTGOMERY	ALA	1.096	6		238	COLUMBUS	OHIO	1.047	335		
179	TACOMA	WASH	1.096	453		239	SPRINGFIELD	OHIO	1.045	355		

RANK	CITY	STATE	1960		PAGE	(1960 MORTALITY RATIO-CONT.)	BANK	CITY	STATE	1960		PAGE
			MORT.	RAT.								
240	HATTIESBURG	MISS	1-045	234			300	BEAUMONT	TEX	1-007	417	
241	VICKSBURG	MISS	1-044	238			301	DEARBORN	MICH	1-005	209	
242	YOUNGSTOWN	OHIO	1-043	359			302	SANTA MONICA	CAL	1-005	46	
243	GREAT FALLS	MONT	1-043	250			303	LA CROSSE	WIS	1-004	469	
244	MALDEN	MASS	1-043	191			304	TORRINGTON	CONN	1-003	63	
245	MEDFORD	MASS	1-043	192			305	LANSING	MICH	1-002	218	
246	BEVERLY	MASS	1-041	176			306	BROWNSVILLE	TEX	1-002	418	
247	CHAMPAIGN	ILL	1-041	98			307	EAU CLAIRE	WIS	1-001	465	
248	WEST ELLIS	WIS	1-040	479			308	LAFAYETTE	LA	1-001	165	
249	YONKERS	NY	1-038	315			309	REISTON	CONN	1-001	54	
250	INDEPENDENCE	MO	1-037	240			310	FORT SMITH	ARK	1-000	10	
251	SPRINGFIELD	MASS	1-035	202			311	ALAMEDA	CAL	0-999	15	
252	PITTSFIELD	MASS	1-034	197			312	MIYWOOD	TLL	0-998	110	
253	EVANSVILLE	IND	1-034	123			313	ROYAL OAK	MICH	0-998	60	
254	KENOSHA	WIS	1-034	468			314	SAN FRANCISCO	CAL	0-997	223	
255	AKRON	OHIO	1-033	328			315	DULUTH	MINN	0-992	222	
256	FOND DU LAC	WIS	1-033	466			316	INGLEWOOD	CAL	0-992	25	
257	BERWYN	ILL	1-033	96			317	BELLINGHAM	WASH	0-992	448	
258	ASHLAND	NY	1-032	156			318	CLIFTON	NJ	0-990	262	
259	ROANDKE	VA	1-031	447			319	CUYAHOGA FALLS	OHIO	0-989	336	
260	LAUREL	MISS	1-030	236			320	SHEBOYGAN	WIS	0-989	475	
261	MARTIN	TENN	1-030	411			321	DES MOINES	IOWA	0-988	143	
262	BINGHAMTON	IND	1-029	291			322	DECATUR	ILL	0-986	102	
263	APPLETON	WIS	1-028	663			323	BILLINGS	MONT	0-985	248	
264	BARBERTON	OHIO	1-027	330			324	NORWOOD	OHIO	0-984	350	
265	TAUNTON	MASS	1-027	203			325	FORT WORTH	TEX	0-983	34	
266	QUINCY	MASS	1-027	198			326	CLINTON	IOWA	0-983	140	
267	BEVERLY	MICH	1-025	216			327	REDWOOD CITY	CAL	0-982	19	
268	JACKSON	NEB	1-025	292			328	BEVERLY HILLS	CAL	0-982	314	
269	OMAHA	NEB	1-025	459			329	WHITE PLAINS	NY	0-980	412	
270	HUNTINGTON	WV	1-025	4			330	MEMPHIS	TENN	0-980	149	
271	GAUSDEN	ALA	1-024	4			331	STOUC CITY	IOWA	0-979	122	
272	SOUTH BEND	IND	1-024	136			332	ELKHART	IND	0-979	35	
273	DISTRICT OF COLUMBIA	CAL	1-024	66			333	RICHMOND	CAL	0-978	35	
274	SAN LEANORO	IND	1-023	42			334	SPokane	WASH	0-978	452	
275	FORT WAYNE	CAL	1-023	124			335	FRESNO	CAL	0-977	22	
276	SOUTH GATE	CAL	1-022	47			336	WATERLOO	IOWA	0-976	150	
277	PORTLAND	ORE	1-022	368			337	NEW BRITAIN	CONN	0-976	58	
278	LITTLE ROCK	ARK	1-021	12			338	SEATTLE	WASH	0-976	451	
279	DAVENPORT	IOWA	1-020	142			339	PARMA	OHIO	0-975	351	
280	BANGOR	ME	1-018	170			340	EAST ORANGE	NJ	0-975	227	
281	MIDDLETOWN	OHIO	1-018	348			341	MINNEAPOLIS	MINN	0-975	477	
282	CHATTANOOGA	TENN	1-018	408			342	MAUSAU	WIS	0-973	27	
283	BURLINGTON	VT	1-017	437			343	LOS ANGELES	CAL	0-971	62	
284	LINCOLN PARK	MICH	1-016	219			344	STAMFORD	CONN	0-970	246	
285	TALLAHASSEE	FLA	1-016	79			345	SPRINGFIELD	MO	0-967	50	
286	SHREVEPORT	LA	1-015	169			346	COLORADO SPRINGS	COLO	0-967	424	
287	ELYRIA	OHIO	1-014	339			347	HOUSTON	TEX	0-964	424	
288	WORCESTER	MASS	1-014	339			348	WILKINSBURG	PENN	0-963	393	
289	BAKERSFIELD	CAL	1-013	205			349	HACKENSACK	NJ	0-961	266	
290	FERNDALE	MICH	1-012	211			350	TYLER	TEX	0-960	431	
291	GRAND RAPIDS	MICH	1-011	213			351	PORTSMOUTH	OHIO	0-957	352	
292	CINCINNATI	OHIO	1-011	332			352	ROCKFORD	ILL	0-957	115	
293	KANSAS CITY	MO	1-011	243			353	BREMERTON	WASH	0-954	449	
294	MINNA	MINN	1-010	231			354	TULSA	OKLA	0-951	366	
295	OAK PARK	ILL	1-010	112			355	RALEIGH	NC	0-950	322	
296	REDONDO BEACH	CAL	1-009	33			356	OAKLAND	CAL	0-949	406	
297	LORAIN	OHIO	1-009	344			357	RAPID CITY	SD	0-948	21	
298	HOT SPRINGS	ARK	1-008	11			358	CCMPTON	CAL	0-947	21	
299	NEWARK	OHIO	1-007	349			359	DURBUQUE	IOWA	0-946	144	

RANK	CITY	STATE	1960		(1960 MORTALITY RATIO-CONT.) (60)	RANK	CITY	STATE	1960	
			MORT.	RAT.					MORT.	RAT.
360	STOCKTON	CAL	0.945	48		420	FORT LAUDERDALE	FLA	0.879	68
361	MARILLO	TEX	0.942	415		421	GRAND FORKS	ND	0.871	327
362	MANITOWOC	WIS	0.937	471		422	POMONA	CAL	0.877	32
363	MACO	TEX	0.937	432		423	WEST PALM BEACH	FLA	0.874	81
364	CORPUS CHRISTI	TEX	0.936	419		424	PASADENA	CAL	0.872	31
365	ST. PAUL	MINN	0.936	230		425	CEDAR RAPIDS	IOWA	0.869	139
366	RIVERSIDE	CAL	0.936	36		426	DENVER	COLO	0.868	151
367	GREENVILLE	MISS	0.934	233		427	MONTCLAIR	NJ	0.867	51
368	SAN BERNARDINO	CAL	0.933	38		428	SANTA ANA	CAL	0.865	44
369	ORLANDO	FLA	0.932	75		429	TOPEKA	KAN	0.863	154
370	ODEN	UTAH	0.932	434		430	SAN MATEO	CAL	0.862	463
371	GALESBURG	ILL	0.928	106		431	LAKELAND	OKLA	0.860	362
372	BURBANK	CAL	0.926	20		432	ST. LOUIS	MO	0.858	72
373	BLOOM	MISS	0.924	232		433	STOUX FALLS	SD	0.857	407
374	MOUNT VERNON	NY	0.924	300		434	CHEYENNE	WY	0.856	480
375	HUTCHINSON	KAN	0.923	151		435	END	OKLA	0.856	361
376	LONG BEACH	CAL	0.923	26		436	MUSKEGEE	OKLA	0.855	363
377	ST. JOSEPH	MO	0.922	244		437	JEFFERSON CITY	MO	0.854	241
378	SAN DIEGO	CAL	0.920	39		438	LUBBOCK	TEX	0.848	426
379	NORTH LITTLE ROCK	ARK	0.920	13		439	EL PASO	TEX	0.847	421
380	EAST CLEVELAND	OHIO	0.919	338		440	DAYTONA BEACH	FLA	0.843	67
381	BURLINGTON	IOWA	0.918	138		441	WICHITA FALLS	TEX	0.841	433
382	ALTON	ILL	0.917	93		442	IOWA CITY	IOWA	0.839	146
383	LAKEWOOD	OHIO	0.917	342		443	SANTA BARBARA	CAL	0.835	45
384	OTTUMWA	IOWA	0.914	148		444	BERKELEY	CAL	0.835	18
385	ANN ARBOR	MICH	0.914	206		445	NEWTON	MASS	0.832	195
386	HUNTINGTON PARK	CAL	0.913	16		446	EUGENE	ORE	0.824	367
387	ALHAMBRA	CAL	0.913	24		447	OKLAHOMA CITY	OKLA	0.823	365
388	TEMPLE	TEX	0.913	430		448	CRANSTON	RI	0.822	396
389	TAMPA	FLA	0.912	80		449	MASON CITY	IOWA	0.822	147
390	MERIDIAN	MISS	0.911	237		450	FARGO	ND	0.818	326
391	MADISON	WIS	0.911	470		451	SALEM	ORE	0.814	369
392	NEW ROCHELLE	NY	0.909	302		452	SALT LAKE CITY	UTAH	0.811	436
393	KALAMAZOO	MICH	0.909	217		453	COLUMBIA	MO	0.807	239
394	DALLAS	TEX	0.908	420		454	ST. PETERSBURG	FLA	0.802	235
395	PORT ARTHUR	TEX	0.908	427		455	JACKSON	MISS	0.796	235
396	PONTIAC	MICH	0.907	221		456	CONCORD	NH	0.791	254
397	SALINA	KAN	0.906	153		457	TUSCALOOSA	ALA	0.786	7
398	WICHITA	KAN	0.906	155		458	PHOENIX	ARIZ	0.783	8
399	TUCSON	ARIZ	0.904	9		459	MIAMI BEACH	FLA	0.781	74
400	ROSNELL	NM	0.903	286		460	WAUMATOSA	WIS	0.778	478
401	MIAMI	FLA	0.902	73		461	PROVO	UTAH	0.776	435
402	GLENDALE	CAL	0.902	23		462	LAREDO	TEX	0.776	425
403	WALTHAM	MASS	0.900	204		463	NORTHAMPTON	MASS	0.775	196
404	FORT DODGE	IOWA	0.900	145		464	ELGIN	ILL	0.773	104
405	HIGHLAND PARK	MICH	0.899	215		465	AUSTIN	TEX	0.773	416
406	JOHNSON CITY	TENN	0.897	410		466	PALO ALTO	CAL	0.766	30
407	UNIVERSITY CITY	MO	0.896	247		467	MIDDLETOWN	CONN	0.760	57
408	JACKSON	TENN	0.895	409		468	ST. CLOUD	MINN	0.759	229
409	CLEVELAND HEIGHTS	OHIO	0.894	334		469	ABILENE	TEX	0.736	414
410	LINCOLN	NEB	0.894	251		470	ROCHESTER	MINN	0.730	228
411	SAN ANGELO	TEX	0.891	428		471	PUEBLO	COLO	0.728	52
412	EVANSTON	ILL	0.890	105		472	NORMAN	OKLA	0.669	364
413	NORWALK	CONN	0.889	61		473	SANTA FE	NM	0.653	287
414	SAN ANTONIO	TEX	0.888	429						
415	EUCLID	OHIO	0.887	340						
416	SHAKER HEIGHTS	OHIO	0.887	354						
417	ALBUQUERQUE	NM	0.885	285						
418	MELROSE	MASS	0.880	193						
419	SAN JOSE	CAL	0.880	41						

RANK	CITY	STATE	1960		(1960 MORTALITY RATIO-CONT.) (60)	RANK	CITY	STATE	1960	
			MORT.	RAT.					MORT.	RAT.
360	STOCKTON	CAL	0.945	48		420	FORT LAUDERDALE	FLA	0.879	68
361	MARILLO	TEX	0.942	415		421	GRAND FORKS	ND	0.871	327
362	MANITOWOC	WIS	0.937	471		422	POMONA	CAL	0.877	32
363	MACO	TEX	0.937	432		423	WEST PALM BEACH	FLA	0.874	81
364	CORPUS CHRISTI	TEX	0.936	419		424	PASADENA	CAL	0.872	31
365	ST. PAUL	MINN	0.936	230		425	CEDAR RAPIDS	IOWA	0.869	139
366	RIVERSIDE	CAL	0.936	36		426	DENVER	COLO	0.868	151
367	GREENVILLE	MISS	0.934	233		427	MONTCLAIR	NJ	0.867	51
368	SAN BERNARDINO	CAL	0.933	38		428	SANTA ANA	CAL	0.865	44
369	ORLANDO	FLA	0.932	75		429	TOPEKA	KAN	0.863	154
370	ODEN	UTAH	0.932	434		430	SAN MATEO	CAL	0.862	463
371	GALESBURG	ILL	0.928	106		431	LAKELAND	OKLA	0.860	362
372	BURBANK	CAL	0.926	20		432	ST. LOUIS	MO	0.858	72
373	BLOOMING	MISS	0.924	232		433	STOUX FALLS	SD	0.857	407
374	MOUNT VERNON	NY	0.924	300		434	CHEYENNE	WY	0.856	480
375	HUTCHINSON	KAN	0.923	151		435	END	OKLA	0.856	361
376	LONG BEACH	CAL	0.923	26		436	MUSKEGEE	OKLA	0.855	363
377	ST. JOSEPH	MO	0.922	244		437	JEFFERSON CITY	MO	0.854	241
378	SAN DIEGO	CAL	0.920	39		438	LUBBOCK	TEX	0.848	426
379	NORTH LITTLE ROCK	ARK	0.920	13		439	EL PASO	TEX	0.847	421
380	EAST CLEVELAND	OHIO	0.919	338		440	DAYTONA BEACH	FLA	0.843	67
381	BURLINGTON	IOWA	0.918	138		441	WICHITA FALLS	TEX	0.841	433
382	ALTON	ILL	0.917	93		442	IOWA CITY	IOWA	0.839	146
383	LAKEWOOD	OHIO	0.917	342		443	SANTA BARBARA	CAL	0.835	45
384	OTTUMWA	IOWA	0.914	148		444	BERKELEY	CAL	0.835	18
385	ANN ARBOR	MICH	0.914	206		445	NEWTON	MASS	0.832	195
386	HUNTINGTON PARK	CAL	0.913	16		446	EUGENE	ORE	0.824	367
387	ALHAMBRA	CAL	0.913	24		447	OKLAHOMA CITY	OKLA	0.823	365
388	TEMPLE	TEX	0.913	430		448	CRANSTON	RI	0.822	396
389	TAMPA	FLA	0.912	80		449	MASON CITY	IOWA	0.822	147
390	MERIDIAN	MISS	0.911	237		450	FARGO	ND	0.818	326
391	MADISON	WIS	0.911	470		451	SALEM	ORE	0.814	369
392	NEW ROCHELLE	NY	0.909	302		452	SALT LAKE CITY	UTAH	0.811	436
393	KALAMAZOO	MICH	0.909	217		453	COLUMBIA	MO	0.807	239
394	DALLAS	TEX	0.908	420		454	ST. PETERSBURG	FLA	0.802	235
395	PORF ARTHUR	TEX	0.908	427		455	JACKSON	MISS	0.796	235
396	PONTIAC	MICH	0.907	221		456	CONCORD	NH	0.791	254
397	SALINA	KAN	0.906	153		457	TUSCALOOSA	ALA	0.786	7
398	WICHITA	KAN	0.906	155		458	PHOENIX	ARIZ	0.783	8
399	TUCSON	ARIZ	0.904	9		459	MIAMI BEACH	FLA	0.781	74
400	ROSNELL	NM	0.903	286		460	WAUMATOSA	WIS	0.778	478
401	MIAMI	FLA	0.902	73		461	PROVO	UTAH	0.776	435
402	GLENDALE	CAL	0.902	23		462	LAREDO	TEX	0.776	425
403	WALTHAM	MASS	0.900	204		463	NORTHAMPTON	MASS	0.775	196
404	FORT DODGE	IOWA	0.900	145		464	ELGIN	ILL	0.773	104
405	HIGHLAND PARK	MICH	0.899	215		465	AUSTIN	TEX	0.773	416
406	JOHNSON CITY	TENN	0.897	410		466	PALO ALTO	CAL	0.766	30
407	UNIVERSITY CITY	MO	0.896	247		467	MIDDLETCHN	CONN	0.760	57
408	JACKSON	TENN	0.895	409		468	ST. CLOUD	MINN	0.759	229
409	CLEVELAND HEIGHTS	OHIO	0.894	334		469	ABILENE	TEX	0.736	414
410	LINCOLN	NEB	0.894	251		470	ROCHESTER	MINN	0.730	228
411	SAN ANGELO	TEX	0.891	428		471	PUEBLO	COLO	0.728	52
412	EVANSTON	ILL	0.890	105		472	NORMAN	OKLA	0.669	364
413	NORWALK	CONN	0.889	61		473	SANTA FE	NM	0.653	287
414	SAN ANTONIO	TEX	0.888	429						
415	EUCLID	OHIO	0.887	340						
416	SHAKER HEIGHTS	OHIO	0.887	354						
417	ALBUQUERQUE	NM	0.885	285						
418	MELROSE	MASS	0.880	193						
419	SAN JOSE	CAL	0.880	41						

CITIES RANKED BY 1970 MORTALITY RATIO-CARDIOVASCULAR RENAL DISEASES

(61)																
RANK	CITY	STATE	1970 MORT.	RAT.	PAGE	RANK	CITY	STATE	1970 MORT.	RAT.	PAGE					
1	NEWBURGH	NY	1-449	301		60	WARREN	OHIO	1-052		358					
2	EAST ST. LOUIS	ILL	1-317	103		61	SPARTANBURG	SC	1-050		405					
3	JOHNSTOWN	PENN	1-309	379		62	BLOOMINGTON	ILL	1-050		97					
4	HOBOKEN	NJ	1-280	267		63	KOKOMO	IND	1-050		128					
5	AUGUSTA	GA	1-259	85		64	EASTON	PENN	1-045		375					
6	NORRISTOWN	PENN	1-240	385		65	MICHIGAN CITY	IND	1-044		131					
7	NEWPORT	KY	1-235	160		66	BELLEVILLE	ILL	1-043		95					
8	COVINGTON	KY	1-232	157		67	GRANITE CITY	ILL	1-042		107					
9	ANNISTON	ALA	1-224	1		68	WCONSOCKET	RI	1-042		401					
10	SAVANNAH	GA	1-175	90		69	BATON ROUGE	LA	1-040		164					
11	ZANESVILLE	OHIO	1-169	360		70	SCHENECTADY	NY	1-040		308					
12	LACKAMANNA	NY	1-165	298		71	HAZELTON	PENN	1-039		378					
13	COLUMBIA	SC	1-155	403		72	MARTON	OHIO	1-038		346					
14	MUNCIE	IND	1-144	133		73	LOUISVILLE	KY	1-037		159					
15	MACON	GA	1-142	88		74	BUFFALO	NY	1-036		292					
16	ALEXANDRIA	LA	1-141	163		75	BLOOMINGTON	IND	1-035		120					
17	LOWELL	MASS	1-134	189		76	ROCK ISLAND	ILL	1-035		116					
18	RESSEMER	ALA	1-117	2		77	COLUMBUS	GA	1-034		86					
19	HAGERSTOWN	MD	1-115	389		78	ALTOONA	PENN	1-034		372					
20	SCRANTON	PENN	1-113	273		79	WHEELING	WV	1-034		462					
21	NEWARK	NJ	1-111	319		80	ERIE	PENN	1-032		376					
22	FAYETTEVILLE	NC	1-111	269		81	WINSTON-SALEM	NC	1-031		325					
23	JERSEY CITY	NJ	1-110	391		82	AUBURN	NY	1-031		290					
24	WASHINGTON	PENN	1-110	391		83	QUINCY	ILL	1-031		114					
25	MCKEESPORT	PENN	1-108	382		84	SPRINGFIELD	ILL	1-031		117					
26	CUMBERLAND	PENN	1-107	174		85	REDONDO BEACH	CAL	1-030		33					
27	EAST CHICAGO	IND	1-107	174		86	LEXINGTON	KY	1-029		158					
28	CHICAGO	ILL	1-104	121		87	NEW ORLEANS	LA	1-026		128					
29	CAMPEN	ILL	1-104	99		88	GREENVILLE	MISS	1-026		233					
30	PADUCAH	KY	1-102	261		89	ALLIANCE	OHIO	1-025		329					
31	BUTTE	MT	1-102	162		90	CHESTER	PENN	1-025		374					
32	CHATTANOOGA	TENN	1-101	249		91	YORK	PENN	1-025		395					
33	BAYONNE	NJ	1-099	258		92	SPRINGFIELD	OHIO	1-025		289					
34	SUPERIOR	WIS	1-093	476		93	AMSTERDAM	NY	1-023		4					
35	PETERSBURG	VA	1-090	444		94	GADSDEN	ALA	1-023		82					
36	PASSILLON	OHIO	1-089	347		95	ALBANY	GA	1-023		177					
37	MASSILLON	SC	1-088	402		96	PENSACOLA	FLA	1-021		113					
38	TROY	NY	1-079	310		97	WAUKESHA	WIS	1-021		125					
39	GREENVILLE	SC	1-077	404		98	EVANSVILLE	IND	1-020		87					
40	ROME	GA	1-076	89		99	LA GRANGE	GA	1-016		330					
41	CICERO	ILL	1-074	100		100	BARBERTON	OHIO	1-015		461					
42	NEW CASTLE	PENN	1-073	383		101	PARKERSBURG	WV	1-015		461					
43	CHARLESTON	WV	1-073	256		102	LANCASTER	PENN	1-012		380					
44	KEARNY	NJ	1-072	250		103	COMPTON	CAL	1-011		21					
45	ATLANTIC CITY	NJ	1-071	257		104	TERRE HAUTE	IND	1-010		137					
46	HARRISBURG	PENN	1-065	377		105	WYANDOTTE	MICH	1-010		225					
47	READING	PENN	1-065	388		106	HUNTINGTON PARK	CAL	1-009		24					
48	PITTSBURGH	PENN	1-064	387		107	WATERTOWN	NY	1-008		313					
49	MILKES-BARRE	PENN	1-062	392		108	OWENSBORO	KY	1-005		161					
50	DANVILLE	ILL	1-062	101		109	NORTH LITTLE ROCK	ARK	1-004		13					
51	ELMIRA	NY	1-060	293		110	ATHENS	GA	1-003		83					
52	BREMERTON	WASH	1-059	449		111	CANTON	OHIO	1-002		331					
53	MONROE	LA	1-058	167		112	ORANGE	NJ	0-999		276					
54	MANSFIELD	OHIO	1-057	345		113	PORTSMOUTH	VA	0-999		445					
55	PERTH AMBOY	NJ	1-057	279		114	JACKSON	MICH	0-998		216					
56	CLARKSBURG	WV	1-057	457		115	PORT HURON	MICH	0-998		222					
57	PORTSMOUTH	OHIO	1-056	352		116	BATTLE CREEK	MICH	0-997		207					
58	BAY CITY	MICH	1-054	208		117	GARY	IND	0-997		125					
59	ROCKY MOUNT	NC	1-053	323		118	SHARON	PENN	0-996		390					
						119	ST. LOUIS	MO	0-995		245					

RANK	CITY	STATE	1970		(1970 MORTALITY RATIO-CONT.) (62)	RANK	CITY	STATE	1970		MORT. RAT.	PAGE
			MORT.	RAT.					MORT.	RAT.		
120	SAGINAW	MICH	0.993	224		180	MACO	TEX	0.949	432		
121	LEWISTON	ME	0.993	171		181	FALL RIVER	MASS	0.948	183		
122	HOLINE	ILL	0.993	111		182	IRVINGTON	NJ	0.947	268		
123	NORFOLK	VA	0.993	443		183	JOHNSON CITY	TENN	0.945	410		
124	HAMMOND	IND	0.992	126		184	KANKAKEE	ILL	0.945	109		
125	JOLIET	ILL	0.991	108		185	LINDEN	NJ	0.944	271		
126	NEW BEDFORD	MASS	0.990	594		186	NEWARK	OHIO	0.942	349		
127	STUBENVILLE	OHIO	0.990	536		187	KANSAS CITY	KAN	0.942	152		
128	STRENTON	NJ	0.987	451		188	PEORIA	ILL	0.939	113		
129	FAIRMONT	WV	0.987	451		189	DULUTH	MINN	0.939	226		
130	NEWPORT	OHIO	0.986	397		190	PINE BLUFF	ARK	0.937	174		
131	NEWTON	RI	0.986	337		191	ELKHART	IND	0.936	172		
132	DAESSAIC	NJ	0.984	277		192	PORTLAND	ME	0.935	142		
133	ALQUIPPA	PENN	0.982	570		193	CLINTON	OWA	0.932	441		
134	WILKINGTON	NC	0.982	324		194	LYNCHBURG	VA	0.932	441		
135	YOUNGSTOWN	OHIO	0.981	359		195	RICHLAND	WY	0.931	446		
136	BIRMINGHAM	ALA	0.981	3		196	YAKIMA	WASH	0.931	409		
137	BALTIMORE	MD	0.980	173		197	PATTERSON	CA	0.930	455		
138	KEY WEST	FLA	0.979	71		198	CHICOPEE	MASS	0.929	278		
139	MUSKOGON	MICH	0.979	220		199	SHREVEPORT	LA	0.928	181		
140	UNION CITY	NJ	0.978	282		200	PANTUCKET	RI	0.928	398		
141	JOPLIN	MO	0.977	242		201	PANTUCKET	WASH	0.926	454		
142	UNION CITY	MO	0.977	37		202	VANCOUVER	WASH	0.926	454		
143	SACRAMENTO	CAL	0.977	135		203	LAFAYETTE	IND	0.925	212		
144	RICHMOND	IND	0.976	135		204	FLINT	MICH	0.925	212		
145	SANDUSKY	OHIO	0.975	353		205	WEST NEW YORK	NJ	0.925	283		
146	ALBANY	NY	0.975	288		206	GALVESTON	TEX	0.924	423		
147	NASHUA	NH	0.975	256		207	BERYAN	ILL	0.924	96		
148	UTICA	NY	0.974	311		208	NEW ALBANY	IND	0.923	134		
149	LITTLE ROCK	ARK	0.974	12		209	CINCINNATI	OHIO	0.922	332		
150	ROME	NY	0.973	307		210	ELIZABETH	NJ	0.921	264		
151	BELOIT	WIS	0.973	464		211	DANVILLE	VA	0.920	440		
152	LEBANON	PENN	0.972	381		212	FITCHBURG	MASS	0.920	184		
153	HAMILTON	OHIO	0.972	341		213	ST. JOSEPH	MO	0.919	244		
154	AURORA	ILL	0.972	94		214	ELYRIA	OHIO	0.919	339		
155	MOBILE	ALA	0.972	5		215	HATTIESBURG	MISS	0.918	234		
156	MAYWOOD	ILL	0.971	110		216	BAKERSFIELD	CAL	0.917	17		
157	ALTON	ILL	0.969	93		217	SALEM	ORE	0.915	369		
158	LINCOLN PARK	MICH	0.969	219		218	MEMPHIS	TENN	0.914	412		
159	BELLEVIEW	NJ	0.968	259		219	LAFAYETTE	LA	0.914	165		
160	BELLEHEM	PENN	0.967	373		220	SAN LEANDRO	CAL	0.913	42		
161	HOLYOKE	MASS	0.967	187		221	OSHKOSH	WIS	0.913	473		
162	ITHACA	NY	0.967	295		222	VALLEY STREAM	NY	0.913	312		
163	TACOMA	WASH	0.966	453		223	ANDERSON	IND	0.912	119		
164	SYRACUSE	NY	0.965	309		224	REVERE	MASS	0.911	199		
165	LARENCE	MASS	0.964	188		225	WATERBURY	CONN	0.911	64		
166	COLUMBUS	OHIO	0.963	335		226	NEW LONDON	CONN	0.911	60		
167	FOND DU LAC	WIS	0.963	466		227	SOMERVILLE	MASS	0.911	201		
168	HOT SPRINGS	ARK	0.962	11		228	CHARLOTTE	NC	0.911	317		
169	HAMIRACK	MICH	0.961	214		229	GARFIELD	NJ	0.911	265		
170	LOCKPORT	NY	0.961	299		230	BROCKTON	MASS	0.909	178		
171	JAMESTOWN	NY	0.956	296		231	KINGSTON	NY	0.908	297		
172	CLEVELAND	OHIO	0.954	353		232	PROVIDENCE	RI	0.907	299		
173	ALFELLS	NC	0.953	316		233	SAN ANGELO	TEX	0.907	128		
174	NIAGARA FALLS	NY	0.953	304		234	SOUTH BEND	IND	0.906	136		
175	TOLDO	OHIO	0.953	357		235	DETROIT	MICH	0.904	219		
176	MONTGOMERY	ALA	0.953	6		236	SOUTH GATE	CAL	0.904	143		
177	ALBANY	PENN	0.952	371		237	DES MOINES	IA	0.904	460		
178	WILLIAMSPORT	PENN	0.952	394		238	MORGANTOWN	WV	0.904	460		
179	MARION	IND	0.951	130		239	HUNTINGTON	WV	0.903	459		

				1970				1970				1970			
				MORT. - RAT.				MORT. - RAT.				MORT. - RAT.			
				(63)				(63)				(63)			
RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE	RANK	CITY	STATE	PAGE
240	NASHVILLE	TENN	413	300	HERNDON	CONN	0.859	300	HERNDON	CONN	0.859	300	HERNDON	CONN	0.859
241	PORTLAND	IND	0.902	301	LONG BEACH	CAL	0.859	301	LONG BEACH	CAL	0.859	301	LONG BEACH	CAL	0.859
242	PORTLAND	VIRG	0.901	302	NEWARK	DELA	0.859	302	NEWARK	DELA	0.859	302	NEWARK	DELA	0.859
243	EUGENE	OHIO	0.900	303	NEW KENSINGTON	PENN	0.859	303	NEW KENSINGTON	PENN	0.859	303	NEW KENSINGTON	PENN	0.859
244	NEW BRUNSWICK	NJ	0.900	304	PARMA	OHIO	0.858	304	PARMA	OHIO	0.858	304	PARMA	OHIO	0.858
245	MANCHESTER	NH	0.900	305	BOSTON	MASS	0.858	305	BOSTON	MASS	0.858	305	BOSTON	MASS	0.858
246	PANAMA CITY	FLA	0.900	306	DEARBORN	MICH	0.857	306	DEARBORN	MICH	0.857	306	DEARBORN	MICH	0.857
247	MAUSAU	WIS	0.895	307	VALLEJO	CAL	0.857	307	VALLEJO	CAL	0.857	307	VALLEJO	CAL	0.857
248	MIDDLETOWN	OHIO	0.895	308	REDWOOD CITY	CAL	0.857	308	REDWOOD CITY	CAL	0.857	308	REDWOOD CITY	CAL	0.857
249	BOISE	ID	0.894	309	GREEN BAY	WIS	0.857	309	GREEN BAY	WIS	0.857	309	GREEN BAY	WIS	0.857
250	ASHLAND	KY	0.893	310	AKRON	OHIO	0.857	310	AKRON	OHIO	0.857	310	AKRON	OHIO	0.857
251	EVERETT	WASH	0.891	311	CORPUS CHRISTI	TEX	0.856	311	CORPUS CHRISTI	TEX	0.856	311	CORPUS CHRISTI	TEX	0.856
252	PONTIAC	MICH	0.891	312	YONKERS	NY	0.856	312	YONKERS	NY	0.856	312	YONKERS	NY	0.856
253	WARWICK	RI	0.891	313	WEST ELLIS	WIS	0.856	313	WEST ELLIS	WIS	0.856	313	WEST ELLIS	WIS	0.856
254	BELLINGHAM	WASH	0.891	314	HARTFORD	CONN	0.855	314	HARTFORD	CONN	0.855	314	HARTFORD	CONN	0.855
255	EVERETT	MASS	0.890	315	OTTUMWA	IOWA	0.855	315	OTTUMWA	IOWA	0.855	315	OTTUMWA	IOWA	0.855
256	BRIDGEPORT	CONN	0.889	316	COUNCIL BLUFFS	IOWA	0.853	316	COUNCIL BLUFFS	IOWA	0.853	316	COUNCIL BLUFFS	IOWA	0.853
257	LORAIN	OHIO	0.889	317	JEFFERSON CITY	MO	0.852	317	JEFFERSON CITY	MO	0.852	317	JEFFERSON CITY	MO	0.852
258	CLIFTON	NJ	0.889	318	SPOKANE	WASH	0.852	318	SPOKANE	WASH	0.852	318	SPOKANE	WASH	0.852
259	VICKSBURG	MISS	0.889	319	DALLAS	TEX	0.851	319	DALLAS	TEX	0.851	319	DALLAS	TEX	0.851
260	DURHAM	NC	0.889	320	BRISTOL	CONN	0.850	320	BRISTOL	CONN	0.850	320	BRISTOL	CONN	0.850
261	BLOOMFIELD	NJ	0.887	321	CHARLOTTESVILLE	VA	0.849	321	CHARLOTTESVILLE	VA	0.849	321	CHARLOTTESVILLE	VA	0.849
262	EAU CLAIRE	WIS	0.887	322	BURLINGTON	VT	0.848	322	BURLINGTON	VT	0.848	322	BURLINGTON	VT	0.848
263	LAKE CHARLES	LA	0.887	323	DECATUR	ILL	0.847	323	DECATUR	ILL	0.847	323	DECATUR	ILL	0.847
264	MASON CITY	IOWA	0.887	324	ROCKFORD	ILL	0.847	324	ROCKFORD	ILL	0.847	324	ROCKFORD	ILL	0.847
265	LYNN	MASS	0.887	325	CHAMPAIGN	ILL	0.844	325	CHAMPAIGN	ILL	0.844	325	CHAMPAIGN	ILL	0.844
266	LAWTON	OKLA	0.886	326	CUYAHOGA FALLS	OHIO	0.844	326	CUYAHOGA FALLS	OHIO	0.844	326	CUYAHOGA FALLS	OHIO	0.844
267	RACINE	WIS	0.885	327	GREENSBORO	NC	0.843	327	GREENSBORO	NC	0.843	327	GREENSBORO	NC	0.843
268	SHEBOYGAN	WIS	0.884	328	MEDFORD	MASS	0.841	328	MEDFORD	MASS	0.841	328	MEDFORD	MASS	0.841
269	KENDRA	WIS	0.883	329	CEDAR RAPIDS	IOWA	0.841	329	CEDAR RAPIDS	IOWA	0.841	329	CEDAR RAPIDS	IOWA	0.841
270	CHELSEA	MASS	0.883	330	LOS ANGELES	CAL	0.841	330	LOS ANGELES	CAL	0.841	330	LOS ANGELES	CAL	0.841
271	GLUCESTER	MASS	0.882	331	CLEVELAND HEIGHTS	OHIO	0.841	331	CLEVELAND HEIGHTS	OHIO	0.841	331	CLEVELAND HEIGHTS	OHIO	0.841
272	NEW YORK CITY	TEX	0.882	332	FORT WORTH	TEX	0.840	332	FORT WORTH	TEX	0.840	332	FORT WORTH	TEX	0.840
273	BURLINGTON	TEX	0.881	333	WEST PALM BEACH	FLA	0.840	333	WEST PALM BEACH	FLA	0.840	333	WEST PALM BEACH	FLA	0.840
274	DENVOR	IOWA	0.881	334	SALERWOOD	MASS	0.839	334	SALERWOOD	MASS	0.839	334	SALERWOOD	MASS	0.839
275	DAVENPORT	IOWA	0.880	335	HAGERHILL	MASS	0.838	335	HAGERHILL	MASS	0.838	335	HAGERHILL	MASS	0.838
276	MILWAUKEE	WIS	0.879	336	PITTSFIELD	MASS	0.837	336	PITTSFIELD	MASS	0.837	336	PITTSFIELD	MASS	0.837
277	HIGH POINT	NC	0.878	337	OAK PARK	ILL	0.837	337	OAK PARK	ILL	0.837	337	OAK PARK	ILL	0.837
278	AMARILLO	TEX	0.877	338	LAUREL	MISS	0.836	338	LAUREL	MISS	0.836	338	LAUREL	MISS	0.836
279	MERIDIAN	MISS	0.876	339	ROCHESTER	NY	0.836	339	ROCHESTER	NY	0.836	339	ROCHESTER	NY	0.836
280	BEAUMONT	TEX	0.875	340	MISHAWAKA	IND	0.836	340	MISHAWAKA	IND	0.836	340	MISHAWAKA	IND	0.836
281	FERNDALE	MICH	0.875	341	PUEBLO	COLO	0.835	341	PUEBLO	COLO	0.835	341	PUEBLO	COLO	0.835
282	SPRINGFIELD	MASS	0.874	342	BURBANK	CAL	0.834	342	BURBANK	CAL	0.834	342	BURBANK	CAL	0.834
283	NEW HAVEN	CONN	0.874	343	RALEIGH	NC	0.834	343	RALEIGH	NC	0.834	343	RALEIGH	NC	0.834
284	JACKSONVILLE	FLA	0.872	344	MUSKOGEE	OKLA	0.833	344	MUSKOGEE	OKLA	0.833	344	MUSKOGEE	OKLA	0.833
285	NORWOOD	OHIO	0.872	345	LANSING	MICH	0.833	345	LANSING	MICH	0.833	345	LANSING	MICH	0.833
286	GRAND RAPIDS	MICH	0.870	346	GAINESVILLE	FLA	0.832	346	GAINESVILLE	FLA	0.832	346	GAINESVILLE	FLA	0.832
287	BANGOR	ME	0.870	347	GALESBURG	ILL	0.832	347	GALESBURG	ILL	0.832	347	GALESBURG	ILL	0.832
288	BINGHAMTON	NY	0.869	348	CHEYENNE	WY	0.832	348	CHEYENNE	WY	0.832	348	CHEYENNE	WY	0.832
289	DUBUQUE	OKLA	0.868	349	SANTA MONICA	CAL	0.831	349	SANTA MONICA	CAL	0.831	349	SANTA MONICA	CAL	0.831
290	POCATTELLO	ID	0.867	350	PORTLAND	ORE	0.829	350	PORTLAND	ORE	0.829	350	PORTLAND	ORE	0.829
291	WORCESTER	MASS	0.867	351	TUCSON	ARIZ	0.828	351	TUCSON	ARIZ	0.828	351	TUCSON	ARIZ	0.828
292	MANITOWOC	WIS	0.866	352	HUTCHINSON	KAN	0.826	352	HUTCHINSON	KAN	0.826	352	HUTCHINSON	KAN	0.826
293	PHILADELPHIA	PENN	0.865	353	NEW BRITAIN	CONN	0.826	353	NEW BRITAIN	CONN	0.826	353	NEW BRITAIN	CONN	0.826
294	RENO	NEV	0.862	354	OMAHA	NEB	0.825	354	OMAHA	NEB	0.825	354	OMAHA	NEB	0.825
295	OKLAHOMA CITY	OKLA	0.862	355	POMONA	CAL	0.825	355	POMONA	CAL	0.825	355	POMONA	CAL	0.825
296	ORLANDO	FLA	0.860	356	EUGENE	ORE	0.824	356	EUGENE	ORE	0.824	356	EUGENE	ORE	0.824
297	WATERLOO	IOWA	0.860	357	BEVERLY HILLS	CAL	0.824	357	BEVERLY HILLS	CAL	0.824	357	BEVERLY HILLS	CAL	0.824
298				358				358				358			
299				359				359				359			

RANK	CITY	STATE	1970 MORT.	RAT.	PAGE	(1970 MORTALITY RATIO-CONT.) (64)	RANK	CITY	STATE	1970 MORT.	RAT.	PAGE
360	STLOUCH CITY	IOWA	0.823	149			420	SAN DIEGO	CAL	0.769	39	
361	DISTRICT OF COLUMBIA		0.821	66			421	LYNNWOOD	CAL	0.768	28	
362	WICHITA	KAN	0.821	155			422	RIVERSIDE	CAL	0.767	36	
363	LAKELAND	FLA	0.819	72			423	FORT LAUDERDALE	FLA	0.767	68	
364	SAN BERNARDINO	CAL	0.818	38			424	MONTECLAIR	NJ	0.766	272	
365	RICHMOND	CAL	0.817	35			425	PROVO	UTAH	0.765	154	
366	LAKESWOOD	OHIO	0.817	342			426	TOPEKA	KAN	0.763	154	
367	ALAMEDA	FLA	0.816	15			427	WALTHAM	MASS	0.762	204	
368	DAYTONA BEACH	FLA	0.816	67			428	PASADENA	CAL	0.762	31	
369	PORT ARTHUR	TEX	0.814	427			429	DENVER	COLOR	0.760	51	
370	ALBUQUERQUE	NM	0.812	285			430	EAST CLEVELAND	OHIO	0.759	338	
371	MUSKOGEE	OKLA	0.812	366			431	ELGIN	ILL	0.757	104	
372	WHITE PLAINS	NY	0.810	316			432	MIDDLETOWN	CONN	0.756	57	
373	WICHITA FALLS	TEX	0.810	433			433	LA CROSSE	WIS	0.756	469	
374	TORRINGTON	CONN	0.810	63			434	TUSCALOOSA	ALA	0.752	7	
375	SAN JOSE	CAL	0.810	41			435	MELROSE	MASS	0.749	193	
376	SEATTLE	WASH	0.809	451			436	STAMFORD	CONN	0.748	62	
377	WILKINSBURG	PENN	0.808	393			437	KANSAS CITY	MO	0.743	243	
378	HACKENSACK	NJ	0.807	266			438	SANTA BARBARA	CAL	0.738	45	
379	INDIANAPOLIS	IND	0.806	127			439	EVANSTON	ILL	0.738	103	
380	ST. PAUL	MINN	0.805	230			440	AUSTIN	TEX	0.736	416	
381	NUTLEY	NJ	0.805	275			441	APLETON	WIS	0.734	463	
382	MINNEAPOLIS	MINN	0.805	227			442	QUINCY	MASS	0.730	198	
383	KNOXVILLE	TENN	0.804	411			443	INDEPENDENCE	MO	0.729	240	
384	SPRINGFIELD	MO	0.803	246			444	BROWNSVILLE	TEX	0.727	235	
385	STOCKTON	CAL	0.802	48			445	JACKSON	MISS	0.727	176	
386	SAN FRANCISCO	CAL	0.799	40			446	BEVERLY	MASS	0.726	302	
387	TEMPLE	TEX	0.799	430			447	NEW ROCHELLE	NY	0.725	302	
388	MADISON	WIS	0.799	470			448	ANN ARBOR	MICH	0.723	206	
389	GRAND FORKS	ND	0.799	327			449	ARLENE	TEX	0.719	414	
390	TYLER	TEX	0.797	431			450	CONCORD	NH	0.717	254	
391	ALHAMBRA	CAL	0.793	16			451	BILLINGS	MONT	0.716	248	
392	PLAINFIELD	NJ	0.792	280			452	SALINA	KAN	0.714	153	
393	GLENDALE	CAL	0.791	23			453	SAN MATEO	CAL	0.714	43	
394	LUBBOCK	TEX	0.791	426			454	LINCOLN	NEB	0.714	251	
395	SHAKER HEIGHTS	OHIO	0.789	354			455	NORMAN	OKLA	0.714	364	
396	ROYAL OAK	MICH	0.789	223			456	EL PASO	TEX	0.713	421	
397	FRESNO	CAL	0.788	22			457	SALT LAKE CITY	UTAH	0.706	436	
398	ROSMELL	NM	0.787	286			458	FORT DODGE	IOWA	0.699	145	
399	GREAT FALLS	MONT	0.785	250			459	LAREDO	TEX	0.699	425	
400	MIAMI	FLA	0.784	73			460	UNIVERSITY CITY	MO	0.698	247	
401	SAN ANTONIO	TEX	0.784	429			461	NEWTON	MASS	0.691	195	
402	RAPID CITY	SD	0.783	406			462	FARGO	ND	0.681	326	
403	STLOUCH FALLS	SD	0.782	407			463	SANTA FE	NM	0.678	287	
404	COLORADO SPRINGS	COLOR	0.782	50			464	CRANSTON	RI	0.674	396	
405	SANTA ANA	CAL	0.782	44			465	PALM ALTO	CAL	0.673	30	
406	OAKLAND	CAL	0.782	29			466	NORTHAMPTON	MASS	0.672	196	
407	NORWALK	CONN	0.781	61			467	ST. CLOUD	MINN	0.671	229	
408	TAMPA	FLA	0.781	80			468	MIAMI BEACH	FLA	0.659	74	
409	HIGHLAND PARK	MICH	0.781	215			469	BERKELEY	CAL	0.650	18	
410	ODGEN	UTAH	0.781	434			470	COLUMBIA	MO	0.624	239	
411	MAUMATOSA	WIS	0.780	478			471	ROCHESTER	MINN	0.591	228	
412	TALLAHASSEE	FLA	0.779	79			472	IOWA CITY	IOWA	0.589	146	
413	PHOENIX	ARIZ	0.775	8			473	EAST ORANGE	NJ	0.554	263	
414	MOUNT VERNON	NY	0.774	300								
415	TAUNTON	MASS	0.773	203								
416	FORT SMITH	ARK	0.773	10								
417	ST. PETERSBURG	FLA	0.771	78								
418	WINONA	MINN	0.771	231								
419	KALAMAZOO	MICH	0.770	217								

CITIES RANKED BY 1950 MORTALITY RATIO—DISEASES OF THE HEART
(65)

RANK	CITY	STATE	1950		PAGE	RANK	CITY	STATE	1950		PAGE
			MORT.	RAT.					MORT.	RAT.	
1	HOBOKEN	NJ	1,749	267	165	60	COLUMBUS	GA	1,313	86	165
2	BUTTE	MONT	1,716	249		61	PANTUCKET	RI	1,307	398	
3	AUGUSTA	GA	1,682	85	166	62	STUEBENVILLE	OHIO	1,306	356	166
4	TROY	NY	1,624	310		63	FALL RIVER	MASS	1,301	183	
5	SPARTANBURG	SC	1,611	405	167	64	ROME	NY	1,301	307	167
6	VALLEY STREAM	NY	1,562	312		65	COVINGTON	KY	1,300	157	
7	ALBANY	NY	1,558	288	168	66	CHARLOTTE	NC	1,300	317	168
8	BAKERSFIELD	CAL	1,557	17		67	YORK	PENN	1,300	395	
9	JOHNSTOWN	PENN	1,539	379	169	68	ALAMEDA	CAL	1,294	15	169
10	EASTON	PENN	1,522	375		69	WCONSOCKET	RI	1,292	401	
11	FAYETTEVILLE	NC	1,520	319	170	70	CHARLOTTESVILLE	VA	1,290	439	170
12	HARRISBURG	PENN	1,519	377		71	WILMINGTON	NC	1,288	324	
13	SCRANTON	PENN	1,509	389	171	72	MANCHESTER	NH	1,281	255	171
14	BAYONNE	NJ	1,503	258		73	RICHMOND	VA	1,277	446	
15	SAVANNAH	GA	1,497	90	172	74	NEWPORT	KY	1,274	160	172
16	GAVESON	TEX	1,491	423		75	SPRINGFIELD	ILL	1,274	117	
17	GREENVILLE	SC	1,482	404	173	76	COUSVILLE	KY	1,274	117	173
18	WEST NEW YORK	NJ	1,479	283		77	CHelsea	MASS	1,272	180	
19	PETERSBURG	VA	1,477	444	174	78	PORTLAND	ME	1,272	162	174
20	HAGERSTOWN	MD	1,473	175		79	DISTRICT OF COLUMBIA	DC	1,272	162	
21	NEWARK	NJ	1,470	273	175	80	PORTSMOUTH	VA	1,272	445	175
22	MILKES-BARRE	PENN	1,468	592		81	BELLEVILLE	IL	1,271	259	
23	CHICAGO	ILL	1,463	89	176	82	NEW HAVEN	CONN	1,266	59	176
24	BALCON	CA	1,462	173		83	FERRDALE	MICH	1,264	211	
25	BALCON MORE	CA	1,462	173	177	84	PITTSFIELD	MASS	1,263	197	177
26	CHANDLER	AZ	1,462	261		85	ORANGE	CA	1,263	276	
27	LEBANON	NJ	1,447	581	178	86	CHARLESTON	SC	1,259	402	178
28	NORTHAMPTON	MASS	1,437	196		87	GLOUCESTER	MASS	1,255	185	
29	ATLANTIC CITY	NJ	1,426	257	179	88	BESSEMER	ALA	1,255	2	179
30	CHESTER	PA	1,426	374		89	YAKIMA	WA	1,254	455	
31	ROCKY MOUNT	NC	1,410	323	180	90	ALTOONA	PENN	1,250	372	180
32	WASHINGTON	DC	1,409	391		91	ANNISTON	ALA	1,249	1	
33	JERSEY CITY	NJ	1,403	269	181	92	PENSACOLA	FLA	1,248	77	181
34	NEWPORT	RI	1,390	397		93	KEARNY	NJ	1,248	270	
35	CUMBERLAND	MD	1,389	174	182	94	SPRINGFIELD	MASS	1,246	202	182
36	VALLEJO	CA	1,381	49		95	SALEM	MASS	1,245	200	
37	NEWPORT NEWS	VA	1,376	442	183	96	CICERO	ILL	1,242	100	183
38	NEW YORK CITY	NY	1,374	303		97	LAWRENCE	MASS	1,241	188	
39	MONROE	LA	1,368	167	184	98	STOCKTON	CAL	1,240	48	184
40	LACKAWANNA	NY	1,365	298		99	WALWATOSA	WIS	1,240	478	
41	NASHUA	NH	1,363	256	185	100	SAN FRANCISCO	CAL	1,238	40	185
42	WINSTON-SALEM	NC	1,362	325		101	BRIDGEPORT	CONN	1,236	53	
43	EAST CHICAGO	IND	1,358	121	186	102	INDIANAPOLIS	IND	1,236	127	186
44	ATHENS	GA	1,356	83		103	YONKERS	NY	1,236	315	
45	EAST ST. LOUIS	ILL	1,353	103	187	104	ELIZABETH	NJ	1,234	264	187
46	NEW ORLEANS	LA	1,351	168		105	SYRACUSE	NY	1,233	309	
47	PHILADELPHIA	PENN	1,351	386	188	106	NEW KENSINGTON	PENN	1,228	584	188
48	NORFOLK	VA	1,350	443		107	BETHLEHEM	PENN	1,224	373	
49	PITTSBURGH	PENN	1,349	387	189	108	DANVILLE	VA	1,223	440	189
50	JOLIET	ILL	1,340	108		109	MOBILE	ALA	1,223	5	
51	COLUMBIA	SC	1,338	403	190	110	WENSBORO	MASS	1,222	164	190
52	DANVILLE	IL	1,337	282		111	QUINCY	ILL	1,221	114	
53	NEW BRUNSWICK	NJ	1,336	101	191	112	HAMILTON	OHIO	1,221	337	191
54	NEW BURG	NY	1,335	274		113	MILWAUKEE	WIS	1,219	472	
55	NEW LEANDRO	CA	1,334	501	192	114	MCKEESPORT	PENN	1,218	382	192
56	REVEREND	MASS	1,331	192		115	BERKLYN	ILL	1,216	96	
57	BUFFALO	NY	1,324	292	193	116	LANCASTER	PENN	1,214	380	193
58	SACRAMENTO	CA	1,314	37		117	HOLYOKE	MASS	1,213	187	
59					194	118	SOLVAY	MASS	1,210	201	194
60						119	SOLVAY	MASS	1,210	201	

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RANK	CITY	STATE	MORT.	RAT.	PAGE	RANK	CITY	STATE	MORT.	RAT.	PAGE
120	READING	PENN	1.208	388		180	DETROIT	MICH	1.138	210	
121	VICKSBURG	MISS	1.203	238		181	PASSAIC	NJ	1.135	277	
122	CLEVELAND	OHIO	1.203	333		182	ORLANDO	FLA	1.132	352	
123	MALDEN	MASS	1.202	191		183	LANCASTER	PA	1.132	352	
124	LAKE CHARLES	LA	1.202	166		184	AUSTIN	TX	1.133	289	
125	NEW ALBANY	IND	1.202	134		185	HATTIESBURG	MISS	1.133	234	
126	BLOOMINGTON	ILL	1.201	257		186	LEXINGTON	KY	1.131	158	
127	ROSTON	ME	1.201	177		187	KANKAKEE	ILL	1.128	109	
128	ROSTON	PENN	1.201	277		188	ASHEVILLE	NC	1.126	316	
129	WYANDOTTE	MICH	1.200	225		189	AUBURN	NY	1.125	290	
130	WYANDOTTE	MASS	1.198	205		190	EUMIRA	NY	1.124	293	
131	WORCESTER	MASS	1.197	194		191	SAN JOSE	CAL	1.123	41	
132	NEW BEDFORD	MASS	1.195	194		192	TAMPA	FLA	1.123	80	
133	PROVIDENCE	RI	1.194	359		193	NEW LONDON	CONN	1.123	60	
134	HOT SPRINGS	ARK	1.193	11		194	DURHAM	NC	1.122	318	
135	MAYWOOD	ILL	1.193	110		195	LOCKPORT	NY	1.119	291	
136	TUCSON	ARIZ	1.193	9		196	BINGHAMTON	NY	1.118	299	
137	REDWOOD CITY	CAL	1.193	34		197	HAMTRAMCK	MICH	1.114	214	
138	WEST ELLIS	WIS	1.193	479		198	OAK PARK	ILL	1.114	112	
139	CHICOPEE	MASS	1.191	181		199	LAKELAND	FLA	1.113	72	
140	ST. LOUIS	MO	1.189	245		200	TOLEDO	OHIO	1.113	357	
141	ALQUIPPA	PENN	1.187	370		201	CHARLESTON	WV	1.112	456	
142	MONTGOMERY	ALA	1.187	6		202	WATERBURY	CONN	1.112	64	
143	BOISE	ID	1.185	91		203	LEWISTON	ME	1.108	171	
144	GREENSBORO	NC	1.185	320		204	OTTUMWA	IOWA	1.109	148	
145	PATTERSON	NJ	1.184	278		205	WILKINSBURG	PENN	1.107	393	
146	GALESBURG	ILL	1.183	106		206	JOPLIN	MO	1.106	242	
147	ROCHESTER	NY	1.181	306		207	TERRE HAUTE	IND	1.105	137	
148	KNOXVILLE	TENN	1.181	411		208	PORT HURON	MICH	1.105	222	
149	SCHENECTADY	NY	1.181	308		209	NUTLEY	NJ	1.105	275	
150	DUBUQUE	IOWA	1.180	144		210	LYNN	MASS	1.104	190	
151	UTICA	NY	1.177	311		211	GARY	IND	1.104	125	
152	FITCHBURG	MASS	1.176	184		212	LITTLE ROCK	ARK	1.104	12	
153	OAKLAND	CAL	1.173	29		213	ITHACA	NY	1.103	295	
154	ALLEN TOWN	PENN	1.166	371		214	BAY CITY	MICH	1.101	208	
155	CHATTANOOGA	TENN	1.163	408		215	BIRMINGHAM	ALA	1.101	3	
156	EUGENE	ORE	1.163	367		216	FOND DU LAC	WIS	1.099	466	
157	WATER TOWN	NY	1.162	313		217	WHITE PLAINS	NY	1.098	314	
158	ALBANY	GA	1.160	82		218	ALEXANDRIA	LA	1.097	163	
159	HAMMOND	IND	1.158	126		219	SOUTH GATE	CAL	1.096	147	
160	BELLEVILLE	ILL	1.156	95		220	BATON ROUGE	LA	1.095	164	
161	PLAINFIELD	NJ	1.154	280		221	CLINTON	IOWA	1.094	140	
162	HAZELTON	PENN	1.153	378		222	GARFIELD	NJ	1.094	265	
163	COMPTON	CAL	1.153	21		223	ZANESVILLE	OHIO	1.092	360	
164	CLARKSBURG	WV	1.152	457		224	KANSAS CITY	MO	1.092	243	
165	TRENTON	NJ	1.149	281		225	AURORA	ILL	1.092	94	
166	EUGENE	ORE	1.148	340		226	WHEELERSBURG	WV	1.089	461	
167	WHEELERSBURG	PENN	1.145	297		227	WHEELERSBURG	WV	1.089	461	
168	BURLINGTON	VT	1.145	427		228	ROCK ISLAND	ILL	1.089	102	
169	IRVINGTOWN	VA	1.145	268		229	NASHVILLE	TENN	1.087	413	
170	LYNCHBURG	VA	1.144	441		230	SEATTLE	WASH	1.087	451	
171	SUPERIOR	WIS	1.144	476		231	SHREVEPORT	LA	1.084	169	
172	PERTH AMBOY	NJ	1.143	279		232	SPRINGFIELD	OHIO	1.083	355	
173	HIGH POINT	NC	1.143	321		233	NIAGARA FALLS	NY	1.082	304	
174	KANSAS CITY	KAN	1.143	152		234	CINCINNATI	OHIO	1.080	332	
175	ALTON	ILL	1.142	93		235	EVANSVILLE	IND	1.079	123	
176	BARBERTON	OHIO	1.141	330		236	KENOSHA	WIS	1.076	468	
177	PEORIA	ILL	1.139	113		237	ANDERSON	IND	1.075	119	
178	WAUKESHA	ILL	1.139	118		238	QUINCY	MASS	1.074	198	
179	KINGSTON	NY	1.138	297		239	MERIDIAN	MISS	1.074	237	

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RANK	CITY	STATE		RANK	CITY	STATE		RANK	CITY	STATE	
360	TYLER	TEX	0.971	431	WATERLOO	IOWA	0.909	420	WATERLOO	IOWA	0.909
361	CHEYENNE	WY	0.971	480	ABILENE	TEX	0.908	421	ABILENE	TEX	0.908
362	CORPUS CHRISTI	TEX	0.970	419	BLOXI	MISS	0.907	422	BLOXI	MISS	0.907
363	EAST CLEVELAND	OHIO	0.969	338	VANCOUVER	WASH	0.902	423	VANCOUVER	WASH	0.902
364	ROME	GA	0.968	89	TULSA	OKLA	0.898	424	TULSA	OKLA	0.898
365	BRISTOL	CONN	0.967	54	RAPID CITY	SD	0.897	425	RAPID CITY	SD	0.897
366	BURLINGTON	IOWA	0.966	138	GADSDEN	ALA	0.892	426	GADSDEN	ALA	0.892
367	COLUMBUS	OHIO	0.966	335	CUYAHOGA FALLS	OHIO	0.891	427	CUYAHOGA FALLS	OHIO	0.891
368	JAMESTOWN	NY	0.966	296	JEFFERSON CITY	MO	0.889	428	JEFFERSON CITY	MO	0.889
369	EAU CLAIRE	WIS	0.965	465	POMONA	CAL	0.887	429	POMONA	CAL	0.887
370	LAKEMOOD	OHIO	0.965	342	CEDAR RAPIDS	IOWA	0.883	430	CEDAR RAPIDS	IOWA	0.883
371	SHEBOYGAN	WIS	0.965	475	ENID	OKLA	0.880	431	ENID	OKLA	0.880
372	TALLAHASSEE	PENN	0.965	390	ST. CLOUD	MINN	0.878	432	ST. CLOUD	MINN	0.878
373	MIAMI	FLA	0.965	79	GREEN BAY	WIS	0.875	433	GREEN BAY	WIS	0.875
374	MIAMI BEACH	FLA	0.962	73	PONTIAC	MICH	0.873	434	PONTIAC	MICH	0.873
375	LONG BEACH	CAL	0.962	26	STAMFORD	CONN	0.870	435	STAMFORD	CONN	0.870
376	SANDUSKY	OHIO	0.962	353	PANAMA CITY	FLA	0.862	436	PANAMA CITY	FLA	0.862
377	SANTA ANA	CAL	0.961	44	KEY WEST	FLA	0.857	437	KEY WEST	FLA	0.857
378	EVERETT	WASH	0.961	182	FORT DODGE	IOWA	0.857	438	FORT DODGE	IOWA	0.857
379	DENVER	COLO	0.960	11	PASADENA	NO	0.848	439	PASADENA	NO	0.848
380	RENO	NEV	0.960	412	SALENA	CAL	0.845	440	SALENA	CAL	0.845
381	SEASIDE	CAL	0.960	42	WALTON	TEX	0.840	441	WALTON	TEX	0.840
382	SAN MATEO	CAL	0.959	43	SAN ANGELO	TEX	0.837	442	SAN ANGELO	TEX	0.837
383	HUNTINGTON PARK	CAL	0.959	24	SALEM	ORE	0.825	443	SALEM	ORE	0.825
384	BURBANK	CAL	0.958	20	GRAND FORKS	ND	0.825	444	GRAND FORKS	ND	0.825
385	PUEBLO	COLO	0.957	52	NORTH LITTLE ROCK	ARK	0.823	445	NORTH LITTLE ROCK	ARK	0.823
386	EL PASO	TEX	0.957	421	FORT SMITH	ARK	0.823	446	FORT SMITH	ARK	0.823
387	ALBUQUERQUE	NM	0.956	285	MIAMI BEACH	FLA	0.815	447	MIAMI BEACH	FLA	0.815
388	ALBUQUERQUE	NM	0.956	147	ANN ARBOR	MICH	0.806	448	ANN ARBOR	MICH	0.806
389	BLOOMINGTON	IND	0.956	120	WINONA	MINN	0.802	449	WINONA	MINN	0.802
390	MINNEAPOLIS	MINN	0.951	334	HARTFORD	CONN	0.793	450	HARTFORD	CONN	0.793
391	CLEVELAND HEIGHTS	OHIO	0.951	227	IOWA CITY	IOWA	0.791	451	IOWA CITY	IOWA	0.791
392	SAN ANTONIO	TEX	0.948	429	LAREDO	TEX	0.791	452	LAREDO	TEX	0.791
393	LORAIN	OHIO	0.947	344	TEMPLE	TEX	0.788	453	TEMPLE	TEX	0.788
394	NEWTON	MASS	0.947	195	SANTA FE	OKLA	0.787	454	SANTA FE	OKLA	0.787
395	INGLEWOOD	CAL	0.946	25	BELLINGHAM	WASH	0.785	455	BELLINGHAM	WASH	0.785
396	ALHAMBRA	CAL	0.945	16	BEVERLY HILLS	CA	0.781	456	BEVERLY HILLS	CA	0.781
397	ASHLAND	KY	0.943	156	CRANSTON	RI	0.780	457	CRANSTON	RI	0.780
398	ELYRIA	OHIO	0.942	339	AUSTIN	TEX	0.777	458	AUSTIN	TEX	0.777
399	SAGINAW	MICH	0.941	224	JOHNSON CITY	TENN	0.775	459	JOHNSON CITY	TENN	0.775
400	CLIFTON	NJ	0.940	262	PROVO	UTAH	0.769	460	PROVO	UTAH	0.769
401	INDEPENDENCE	MO	0.940	240	CONCORD	NH	0.750	461	CONCORD	NH	0.750
402	STOIX FALLS	SD	0.940	407	ELGIN	ILL	0.749	462	ELGIN	ILL	0.749
403	MONTCLAIR	NJ	0.937	272	ST. PETERSBURG	FLA	0.741	463	ST. PETERSBURG	FLA	0.741
404	GLENDALE	CAL	0.935	23	ROCHESTER	MINN	0.733	464	ROCHESTER	MINN	0.733
405	STOIX CITY	IOWA	0.933	149	LUBBOCK	TEX	0.732	465	LUBBOCK	TEX	0.732
406	MISHAWAKA	IND	0.933	132	SHAKER HEIGHTS	OHIO	0.723	466	SHAKER HEIGHTS	OHIO	0.723
407	FORT LAUDERDALE	FLA	0.931	68	LINCOLN	NEB	0.711	467	LINCOLN	NEB	0.711
408	MUSKOGEE	OKLA	0.928	363	COLUMBIA	MO	0.706	468	COLUMBIA	MO	0.706
409	HIGHLAND PARK	MICH	0.927	215	MIDDLETOWN	CONN	0.660	469	MIDDLETOWN	CONN	0.660
410	APPLETON	WIS	0.924	463	NEWAN	OKLA	0.545	470	NEWAN	OKLA	0.545
411	WANGFIELD	OHIO	0.922	342				471			
412	WHEELING	WV	0.920	411				472			
413	MAKINNO	TEX	0.920	415				473			
414	JACKSON	TENN	0.919	469							
415	RICHMOND	IND	0.917	135							
416	MANITOWOC	WIS	0.915	471							
417	OKLAHOMA CITY	OKLA	0.914	365							
418	ELKHART	IND	0.914	122							
419	MARION	OHIO	0.911	346							

240	RICHMOND	CAL	1-072	35	300	WICHITA FALLS	TEX	1-025	433
241	PINE BLUFF	ARK	1-071	14	301	MUSKOGEE	MICH	1-023	220
242	LINDEN	NJ	1-070	271	302	GRAND RAPIDS	MICH	1-023	213
243	BATTLE CREEK	MICH	1-070	207	303	WEST PALM BEACH	FLA	1-022	81
244	LOWELL	MASS	1-070	189	304	OSHKOSH	WIS	1-022	473
245	DECATUR	ILL	1-068	102	305	LA CRUSSE	WIS	1-022	469
246	KOKOMO	IND	1-067	128	306	RALEIGH	NC	1-019	322
247	GREENVILLE	MISS	1-067	233	307	LAUREL	MISS	1-014	236
248	WARWICK	RI	1-066	400	308	ROYAL OAK	MICH	1-014	223
249	FORT WAYNE	IND	1-066	124	309	ROSWELL	NM	1-013	286
250	NORRISTOWN	PENN	1-065	385	310	SPOKANE	WASH	1-012	452
251	BLCCMFIELD	IND	1-065	260	311	FAIRMONT	WV	1-012	458
252	MARION	IND	1-064	130	312	UNIVERSITY CITY	MO	1-011	247
253	MELROSE	MASS	1-063	193	313	SOUTH BEND	IND	1-011	136
254	NORWOOD	OHIO	1-062	350	314	EVANSTON	ILL	1-011	105
255	DULUTH	MINN	1-062	226	315	ST. PAUL	MINN	1-011	230
256	REDONDO BEACH	CAL	1-061	33	316	HUTCHINSON	KAN	1-010	151
257	GRANITE CITY	ILL	1-059	107	317	GAINESVILLE	FLA	1-010	69
258	BREHERTON	WASH	1-059	449	318	LANSING	MICH	1-010	218
259	BROWNVILLE	TEX	1-057	418	319	JACKSON	MISS	1-009	235
260	MASSILLON	OHIO	1-055	347	320	LINCOLN PARK	MICH	1-008	219
261	SANTA MONICA	CAL	1-055	46	321	BEAUMONT	TEX	1-008	417
262	DEARBORN	MICH	1-055	209	322	MUNCIE	IND	1-007	133
263	HACKENSACK	NJ	1-054	286	323	ST. JOSEPH	MO	1-007	244
264	EAST ORANGE	NJ	1-053	263	324	AKRON	OHIO	1-006	328
265	NEWARK	OHIO	1-052	349	325	MAUSAU	WIS	1-005	477
266	SPRINGFIELD	MO	1-052	246	326	LIMA	OHIO	1-005	343
267	PORTLAND	ME	1-052	172	327	RACINE	WIS	1-003	474
268	LAFAYETTE	ILL	1-052	119	328	KALAMAZOO	MICH	1-003	217
269	PLAINFIELD	ILL	1-051	111	329	RIVERSIDE	CAL	1-003	136
270	PORTLAND	ORE	1-051	36	330	SEVERLY	MASS	1-002	116
271	PORTLAND	ORE	1-051	363	331	PICETEGAN CITY	IND	1-001	131
272	NEW CASTLE	PENN	1-050	300	332	CANTONMOUTH	OHIO	0-999	351
273	MCINT VERNON	OHIO	1-050	300	333	WILMINGTON	OHIO	0-998	331
274	WARREN	OHIO	1-049	358	334	GALLUCHE	OHIO	0-996	320
275	MEDFORD	MASS	1-049	192	335	JACKSON	MICH	0-996	216
276	LAFAYETTE	LA	1-049	165	336	DES MOINES	IOWA	0-995	143
277	MERTDEN	CONN	1-048	56	337	GREAT FALLS	MONT	0-995	250
278	HOUSTON	TEX	1-048	424	338	DALLAS	TEX	0-994	420
279	LOS ANGELES	CAL	1-046	27	339	HAVERHILL	MASS	0-993	186
280	BROCKTON	MASS	1-045	178	340	TOPEKA	KAN	0-993	154
281	FRESNO	CAL	1-042	22	341	COUNCIL BLUFFS	IOWA	0-992	141
282	TUSCALOOSA	ALA	1-042	7	342	SANTA BARBARA	CAL	0-992	45
283	TAUNTON	MASS	1-041	203	343	BERKELEY	CAL	0-992	18
284	TACOMA	WASH	1-041	453	344	MALHAM	MASS	0-988	204
285	MIDDLETOWN	OHIO	1-041	348	345	DAVENPORT	IOWA	0-987	142
286	EVERETT	WASH	1-040	450	346	LYNWOOD	CAL	0-985	28
287	BILLINGS	MONT	1-039	248	347	COLORADO SPRINGS	COLO	0-983	50
288	FORT WORTH	TEX	1-037	422	348	NEW ROCHELLE	NY	0-982	302
289	TORRINGTON	CONN	1-037	63	349	MORGANTOWN	WV	0-980	447
290	PHOENIX	ARIZ	1-036	8	350	ROANOKE	VA	0-980	460
291	OMAHA	NEB	1-036	252	351	FLINT	MICH	0-978	212
292	HUNTINGTON	WV	1-035	459	352	ROCKFORD	ILL	0-978	115
293	BELOIT	WIS	1-035	464	353	NEW BRITAIN	CONN	0-976	58
294	JACKSONVILLE	FLA	1-034	70	354	WICHITA	KAN	0-975	155
295	LA GRANGE	CAL	1-034	87	355	PARMA	OHIO	0-975	351
296	SAN BERNARDINO	CAL	1-033	38	356	DAYTONA BEACH	FLA	0-974	67
297	SALT LAKE CITY	UTAH	1-033	436	357	PORT ARTHUR	TEX	0-973	427
298	CHAMPAIGN	ILL	1-029	98	358	SAN DIEGO	CAL	0-972	39
299	BANGOR	ME	1-025	170	359	NORWALK	CONN	0-971	61

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RANK	CITY	STATE	1960			RANK	CITY	STATE	1960		
			MORT.	RAT.	PAGE				MORT.	RAT.	PAGE
(69)											
1	HOBOKEN	NJ	1.703	267		60	NEWPORT NEWS	VA	1.233	442	
2	BAYONNE	NJ	1.611	258		61	SPARTANBURG	SC	1.232	405	
3	HAGERSTOWN	MD	1.561	175		62	PADUCAH	KY	1.231	162	
4	SCRANTON	PENN	1.544	389		63	NEWPORT	KY	1.229	160	
5	EAST ST. LOUIS	ILL	1.515	103		64	HAZELTON	PENN	1.229	378	
6	NEWARK	NJ	1.501	273		65	WARWICK	RI	1.226	400	
7	JOHNSTOWN	PENN	1.499	379		66	PATTERSON	NJ	1.226	278	
8	CAMDEN	NJ	1.479	261		67	ALLENSTOWN	PENN	1.225	371	
9	CHESTER	PENN	1.463	374		68	LINDEN	NJ	1.224	271	
10	ALBANY	NY	1.438	288		69	GARFIELD	NJ	1.221	265	
11	CUMBERLAND	MD	1.430	174		70	NUTLEY	NJ	1.215	275	
12	TROY	NY	1.423	310		71	NEW KENSINGTON	PENN	1.215	384	
13	EASTON	PENN	1.409	375		72	HOLYOKE	MASS	1.211	187	
14	LEBANON	PENN	1.408	381		73	REACING	PENN	1.209	388	
15	CHICAGO	ILL	1.400	99		74	LEWISTON	ME	1.208	171	
16	WILKES-BARRE	PENN	1.395	392		75	SPRINGFIELD	ILL	1.208	117	
17	BALTIMORE	MD	1.390	173		76	EVERETT	MASS	1.206	182	
18	BUTTE	MONT	1.389	249		77	AURORA	ILL	1.205	94	
19	UNION CITY	NJ	1.386	282		78	SACRAMENTO	CAL	1.205	37	
20	JERSEY CITY	NJ	1.378	269		79	TRENTON	NJ	1.201	281	
21	NEWBURGH	NY	1.373	301		80	DANVILLE	ILL	1.199	101	
22	KEARNY	NJ	1.366	270		81	CICERO	ILL	1.199	100	
23	SUPERIOR	WIS	1.366	476		82	PENSACOLA	FLA	1.198	77	
24	LACKAWANNA	NY	1.361	298		83	PORTSMOUTH	VA	1.198	445	
25	WEST NEW YORK	NJ	1.359	283		84	IRVINGTON	NJ	1.187	268	
26	BOISE	ID	1.358	91		85	MANCHESTER	NH	1.184	255	
27	MACON	GA	1.348	189		86	MAUKEGAN	ILL	1.184	118	
28	LOWELL	MASS	1.341	88		87	GREENVILLE	SC	1.183	404	
29	WCONSOCKET	RI	1.340	401		88	EAST CHICAGO	IND	1.182	121	
30	LANCASTER	PENN	1.337	380		89	VALLEJO	CAL	1.182	49	
31	PERTH AMBOY	NJ	1.328	279		90	ERIE	PENN	1.181	376	
32	GLUCESTER	MASS	1.325	185		91	HAMILTON	OHIO	1.180	341	
33	PETERSBURG	VA	1.321	444		92	COVINGTON	KY	1.180	157	
34	WASHINGTON	PENN	1.320	391		93	SOMERVILLE	MASS	1.178	201	
35	ROME	NY	1.319	307		94	PASSAIC	NJ	1.177	277	
36	HARRISBURG	PENN	1.317	377		95	NEWPORT	RI	1.176	397	
37	RENO	NEV	1.312	253		96	WHEELING	WV	1.174	462	
38	PHILADELPHIA	PENN	1.311	386		97	CHARLESTON	WV	1.174	456	
39	SCHENECTADY	NY	1.301	308		98	ALTONA	PENN	1.172	372	
40	STUEBENVILLE	OHIO	1.298	356		99	FALL RIVER	MASS	1.172	183	
41	ITHACA	NY	1.294	295		100	ABURN	NY	1.172	290	
42	AUGUSTA	GA	1.292	85		101	NASHVILLE	TENN	1.169	413	
43	VALLEY STREAM	NY	1.288	312		102	HAPTRAMCK	MICH	1.166	214	
44	PITTSBURGH	PENN	1.278	387		103	BRIDGEPORT	CONN	1.166	53	
45	BUFFALO	NY	1.275	292		104	SHARON	PENN	1.164	390	
46	ELIZABETH	NJ	1.269	284		105	MALDEN	MASS	1.163	313	
47	ALEXANDRIA	LA	1.267	163		106	COLUMBUS	GA	1.163	86	
48	WHEELING	OHIO	1.267	347		107	UTICA	NY	1.163	311	
49	WHEELING	WV	1.267	5		108	CLEVELAND	OHIO	1.159	317	
50	CHELSEA	MASS	1.256	180		109	CHARLOTTE	NC	1.158	317	
51	ORANGE	MASS	1.253	276		110	YORK	PENN	1.156	395	
52	NEW YORK CITY	NY	1.252	303		111	SAVANNAH	GA	1.156	90	
53	MCKEESPORT	PENN	1.250	382		112	NORFOLK	VA	1.156	443	
54	NEW ORLEANS	LA	1.247	168		113	DURHAM	NC	1.155	318	
55	ATLANTIC CITY	NJ	1.247	257		114	BOSTON	MASS	1.155	177	
56	BELLEVILLE	NJ	1.245	259		115	PORT HURON	MICH	1.154	222	
57	JOLIET	ILL	1.245	108		116	SYRACUSE	NY	1.153	309	
58	ANDERSON	IND	1.244	119		117	YONKERS	NY	1.152	315	
59	PROVIDENCE	RI	1.238	399		118	BETHLEHEM	PENN	1.151	373	
						119	REVERE	MASS	1.150	199	

RANK	CITY	STATE	1960			(1960 MORTALITY RATE-CONT.)			CITY	STATE	1960		
			RANK	MORT.	RAT.	PAGE	(%)	RANK			RANK	MORT.	RAT.
120	LAFAYETTE	IND.	1149	129				180	MEDFORD	MASS	1086	192	
121	NEW CASTLE	DELA.	1143	323				181	DETROIT	MICH	1086	210	
122	GARY	IND.	1146	125				182	VANCOUVER	WASH	1086	454	
123	GRANITE CITY	ILL	1145	107				183	ROCK ISLAND	ILL	1084	116	
124	BESSEMER	ALA	1143	2				184	EAST ORANGE	NJ	1082	263	
125	PARTUCKET	RI	1143	398				185	PITTSFIELD	MASS	1081	197	
126	LEXINGTON	KY	1143	158				186	NEW ALBANY	IND	1081	134	
127	MUSKOGEE	MICH	1142	220				187	KINGSTON	NY	1080	297	
128	KANKAKEE	ILL	1140	109				188	LAWRENCE	MASS	1080	188	
129	COUNCIL BLUFFS	IOWA	1139	141				189	MORGANTOWN	WV	1080	460	
130	KANSAS CITY	KAN.	1139	152				190	HARTFORD	CONN	1079	55	
131	FITCHBURG	MASS	1139	184				191	HOT SPRINGS	ARK	1078	11	
132	ELMIRA	NY	1138	293				192	LAKE CHARLES	LA	1077	166	
133	MOLINE	ILL	1138	111				193	SANDUSKY	OHIO	1074	353	
134	INDEPENDENCE	MO	1135	240				194	NEW BEDFORD	MASS	1073	194	
135	ROCHESTER	NY	1135	306				195	JAMESTOWN	NY	1073	296	
136	BAY CITY	MICH	1134	208				196	WATERBURY	CONN	1073	64	
137	BLOOMFIELD	NJ	1134	260				197	DANVILLE	VA	1072	440	
138	TERRE HAUTE	IND	1131	137				198	LORAIN	OHIO	1072	344	
139	ONENSBORO	KY	1130	161				199	BATTLE CREEK	MICH	1068	207	
140	PORTLAND	ME	1130	172				200	MERIDEN	CONN	1068	56	
141	BELLEVILLE	ILL	1129	95				201	SAN LEANDRO	CAL	1068	42	
142	COLUMBIA	SC	1128	403				202	SPRINGFIELD	MASS	1067	202	
143	MALDEN	MASS	1128	191				203	FAYETTEVILLE	NC	1066	319	
144	RICHMOND	VA	1127	446				204	BELCIT	WIS	1065	464	
145	AMSTERDAM	NY	1126	289				205	LOUISVILLE	KY	1064	159	
146	POCATTELL	ID	1125	92				206	LYNWOOD	CAL	1063	28	
147	OSHKOSH	WIS	1124	473				207	OAK PARK	ILL	1062	112	
148	PEORIA	ILL	1122	113				208	KOKOMO	IND	1060	128	
149	PARKERSBURG	WV	1121	461				209	DISTRICT OF COLUMBIA	MASS	1060	66	
150	WYANDOTT	MICH	1120	225				210	TAUNTON	MASS	1060	203	
151	ASHEVILLE	NC	1116	316				211	CANTON	OHIO	1058	331	
152	NORRISTOWN	PENN	1114	385				212	BIRMINGHAM	ALA	1056	3	
153	NEW HAVEN	CONN	1114	59				213	HATTIESBURG	MISS	1054	234	
154	MONROE	LA	1112	167				214	RACINE	WIS	1053	474	
155	WINSTON-SALEM	NC	1112	325				215	GREAT FALLS	MONT	1049	250	
156	NEW BRUNSWICK	NJ	1110	274				216	GAZDEN	ALA	1049	4	
157	JOPLIN	MO	1110	242				217	INDIANAPOLIS	IND	1049	127	
158	SALERIE	MASS	1110	100				218	HACKENSACK	NJ	1048	266	
159	WINTER	MASS	1109	81				219	CHICAGO	GA	1045	189	
160	PLAINFIELD	NJ	1106	281				220	SUREBORO	ILL	1044	197	
161	CLARKSBURG	WV	1106	457				221	BUCCHIGNON	ILL	1044	465	
162	WILMINGTON	NC	1105	324				222	FAULCLAIRE	WIS	1042	120	
163	BATON ROUGE	LA	1104	164				223	BLOOMINGTON	IND	1041	212	
164	BEVERLY	MASS	1103	176				224	FLINT	MICH	1041	252	
165	WORCESTER	MASS	1103	205				225	OWAHA	NEB	1040	357	
166	WILLIAMSPORT	PENN	1103	394				226	EVERETT	WASH	1040	450	
167	BERNYS	ILL	1102	96				227	TOLEDO	OHIO	1040	357	
168	ST. LOUIS	MO	1101	245				228	CHAMPAIGN	ILL	1040	98	
169	TACOMA	WASH	1101	453				229	LYNN	MASS	1039	190	
170	NIAGARA FALLS	NY	1099	304				230	SOUTH GATE	CAL	1039	47	
171	PINE BLUFF	ARK	1099	14				231	WHITE PLAINS	NY	1039	314	
172	BROCKTON	MASS	1098	178				232	BINGHAMTON	NY	1037	291	
173	LYNCHBURG	VA	1098	441				233	ALBANY	GA	1037	82	
174	ALBUQUERQUE	PENN	1093	370				234	GAINESVILLE	FLA	1035	69	
175	MAYWOOD	ILL	1093	110				235	AKRON	OHIO	1035	328	
176	LOCKPORT	NY	1092	295				236	FAIRMONT	WV	1035	458	
177	QUINCY	ILL	1091	114				237	HAMMOND	IND	1034	126	
178	ZANESVILLE	OHIO	1088	360				238	ALAMEDA	CAL	1033	15	
179	ROCKY MOUNT	NC	1088	323				239	ROYAL OAK	MICH	1033	223	

RANK	CITY	STATE	1960		RANK	CITY	STATE	1960	
			MORT.	RAT.				MORT.	RAT.
240	BURLINGTON	VT	1-031	437	300	FRESNO	CAL	0-984	22
241	BARBERTON	OHIO	1-031	330	301	ANNISTON	ALA	0-983	1
242	MILWAUKEE	WIS	1-031	472	302	ASHLAND	CAL	0-980	29
243	ALLIANCE	OHIO	1-029	329	303	NASHUA	NH	0-979	256
244	BRI STOL	CONN	1-029	54	304	APPLETON	WIS	0-978	463
245	QUINCY	MASS	1-028	198	305	ROANOKE	VA	0-978	447
246	WARREN	OHIO	1-028	358	306	YOUNGSTOWN	OHIO	0-978	359
247	JACKSONVILLE	FLA	1-027	70	307	MICHIGAN CITY	IND	0-977	131
248	BAKERSFIELD	CAL	1-027	17	308	NEW BRITAIN	CONN	0-977	58
249	COLUMBUS	OHIO	1-026	335	309	MONTGOMERY	ALA	0-976	6
250	CHARLESTON	SC	1-025	402	310	PORTLAND	ORE	0-976	368
251	CLIFTON	NJ	1-024	262	311	BEVERLY HILLS	CAL	0-972	19
252	MANFIELD	OHIO	1-024	345	312	LOS ANGELES	CAL	0-971	27
253	HIGH POINT	NC	1-023	321	313	MIDDLETOWN	OHIO	0-969	348
254	SAGINAW	MICH	1-022	224	314	PARRA	OHIO	0-967	351
255	KENDSHA	MICH	1-020	468	315	FERNDALE	MICH	0-967	211
256	MARION	OHIO	1-020	346	316	FORT WORTH	TEX	0-966	422
257	TYLER	TEX	1-020	431	317	LIMA	OHIO	0-966	343
258	DEARBORN	MICH	1-019	209	318	INGLEWOOD	CAL	0-965	52
259	SAN FRANCISCO	CAL	1-019	40	319	RICHMOND	CAL	0-964	3
260	REDONDO BEACH	CAL	1-018	189	320	ELECTRY	UTAH	0-962	122
261	HAVERHILL	MASS	1-018	439	321	NEW LONDON	CONN	0-962	436
262	CHARLOTTE'SVILLE	OHIO	1-018	350	322	ST. LOUIS CITY	MO	0-960	60
263	NEWARK	OHIO	1-017	332	323	SEATTLE	WASH	0-958	149
264	WATSONVILLE	TEX	1-017	423	324	BEAUMONT	TEX	0-958	417
265	GALVESTON	ARK	1-017	10	325	HOUSTON	TEX	0-956	424
266	FORT SMITH	IND	1-016	156	326	LAFAYETTE	LA	0-956	165
267	ASHLAND	IND	1-016	130	327	SOUTH BEND	IND	0-955	136
268	STAMFORD	CONN	1-015	62	328	FORT WAYNE	IND	0-955	124
269	LINCOLN PARK	MICH	1-015	219	329	LANSING	MICH	0-951	218
270	HUNTINGTON	WV	1-014	459	330	STOCKTON	CAL	0-950	48
271	GREENSBORO	NC	1-014	320	331	ROCKFORD	ILL	0-949	115
272	LA GRANGE	GA	1-014	87	332	PORTSMOUTH	OHIO	0-949	352
273	MISHAWAKA	IND	1-012	132	333	SAN BERNARDINO	CAL	0-948	38
274	KANSAS CITY	MO	1-010	243	334	VICKSBURG	MISS	0-946	238
275	SPokane	WASH	1-009	452	335	DECATUR	ILL	0-945	102
276	MCUNT VERNON	NY	1-008	300	336	SPRINGFIELD	MO	0-945	246
277	GREEN BAY	WIS	1-004	467	337	COMPTON	CAL	0-944	21
278	DAYTON	OHIO	1-003	337	338	ORLANDO	FLA	0-943	75
279	ELYRIA	OHIO	1-002	339	339	RALEIGH	NC	0-943	322
280	MUNCIE	IND	1-001	133	340	KNOXVILLE	TENN	0-942	411
281	JACKSON	FLA	0-996	216	341	NEWARK	OHIO	0-940	349
282	PANAMA CITY	IND	0-996	76	342	GRAND RAPIDS	MICH	0-940	213
283	EVANSVILLE	IND	0-996	123	343	CLINTON	IOWA	0-940	140
284	WILKINSBURG	PENN	0-995	393	344	MINNEAPOLIS	MICH	0-939	227
285	DULUTH	MINN	0-994	226	345	PONTIAC	MICH	0-939	221
286	SPRINGFIELD	OHIO	0-994	355	346	TORRINGTON	CONN	0-937	63
287	YAKIMA	WASH	0-994	455	347	OTTUMWA	IOWA	0-936	148
288	LITTLE ROCK	ARK	0-994	12	348	WALTHAM	MASS	0-936	204
289	DAVENPORT	IOWA	0-993	142	349	ATHENS	GA	0-935	83
290	BREPERION	WASH	0-992	449	350	BELLINGHAM	WASH	0-935	448
291	FRONTVILLE	WIS	0-990	418	351	NEW ROCHELLE	WASH	0-933	303
292	BONDU LAC	MICH	0-990	466	352	ONL INGHAM	TOWA	0-933	136
293	BINGHAM	WIS	0-989	170	353	MONTICELLO	CAL	0-931	126
294	RICHMOND	NE	0-987	135	354	DES MOINES	IOWA	0-930	222
295	SANTA MONICA	IND	0-985	46	355	GALESBURG	ILL	0-929	143
296	REDWOOD CITY	CAL	0-985	36	356	KEY WEST	FLA	0-928	231
297	CORPUS CHRISTI	TEX	0-985	419	357				
298	WEST ELLIS	WIS	0-984	479	358				
299					359				

RANK	CITY	STATE	1960		(1960 MORTALITY RATE-CONT.)	RANK	CITY	STATE	1960	
			MORT.	RAT.					MORT.	RAT.
360	CLEVELAND HEIGHTS	OHIO	0.927	334	420	NEWTON	MASS	0.848	195	
361	GREENVILLE	MISS	0.925	233	421	SAN MATEO	CAL	0.845	43	
362	SHEBOYGAN	WIS	0.923	475	422	DENVER	COLO	0.844	51	
363	LAKEMOOD	OHIO	0.922	342	423	IOWA CITY	IOWA	0.844	146	
364	EAST CLEVELAND	OHIO	0.921	338	424	MUSKOGEE	OKLA	0.843	363	
365	MIAMI	FLA	0.920	73	425	RUSSELL	NH	0.842	286	
366	MANITOWOC	WIS	0.918	471	426	MERIDIAN	MISS	0.841	237	
367	ST. PAUL	MINN	0.914	230	427	FITCHESON	KAN	0.839	151	
368	HIGHLAND PARK	MICH	0.909	215	428	SAN ANTONIO	TEX	0.839	429	
369	SAN DIEGO	CAL	0.909	39	429	LUBBOCK	TEX	0.838	426	
370	EVANSTON	ILL	0.907	105	430	JOHNSON CITY	TENN	0.838	410	
371	ALTON	ILL	0.906	93	431	BERKELEY	CAL	0.838	18	
372	UNIVERSITY CITY	MO	0.906	247	432	CHEYENNE	WY	0.833	480	
373	AMARILLO	TEX	0.905	415	433	ST. CLOUD	MINN	0.831	229	
374	COLORADO SPRINGS	COLO	0.904	50	434	CONCORD	NH	0.826	254	
375	ST. JOSEPH	MO	0.903	244	435	SANTA ANA	CAL	0.824	44	
376	NORTH LITTLE ROCK	ARK	0.903	13	436	LAKELAND	FLA	0.820	72	
377	PORT ARTHUR	TEX	0.903	427	437	SALEM	ORE	0.820	369	
378	CUYAHOGA FALLS	OHIO	0.902	336	438	POMONA	CAL	0.819	32	
379	LAUREL	MISS	0.902	477	439	SANTA BARBARA	CAL	0.817	45	
380	RIVERSIDE	CAL	0.900	236	440	EDGAR RAPIDS	IOWA	0.817	139	
381	SHAKER HEIGHTS	OHIO	0.899	354	441	CEDAR RAPIDS	ILL	0.815	104	
382	SHAKER HEIGHTS	TENN	0.899	408	442	DURBUQUE	IOWA	0.815	144	
383	CHATTANOOGA	TENN	0.899	408	443	ALBUQUERQUE	NM	0.810	285	
384	FORT DODGE	IOWA	0.897	145	444	LINCOLN	NEB	0.810	251	
385	ALHAMBRA	CAL	0.896	16	445	SALT LAKE CITY	UTAH	0.810	436	
386	WICHITA	KAN	0.892	155	446	PROVO	UTAH	0.809	435	
387	TUCSON	ARIZ	0.890	9	447	MASON CITY	IOWA	0.808	147	
388	BURBANK	CAL	0.888	20	448	PHOENIX	ARIZ	0.802	153	
389	ENID	OKLA	0.885	361	449	SALINA	ARIZ	0.796	8	
390	MADISON	WIS	0.885	390	450	EUGENE	ORE	0.796	367	
391	BLOXT	MISS	0.884	232	451	JACKSON	TENN	0.795	409	
392	BILLINGS	MONT	0.884	248	452	NORTHAMPTON	MASS	0.795	196	
393	EUGENE	OHIO	0.883	340	453	SAN ANGELO	TEX	0.788	428	
394	TULSA	OKLA	0.882	366	454	PASADENA	CAL	0.787	31	
395	DALLAS	TEX	0.881	420	455	ANN ARBOR	MICH	0.786	206	
396	LA CROSSE	WIS	0.880	469	456	ST. PETERSBURG	FLA	0.766	78	
397	MELROSE	MASS	0.879	193	457	PUEBLO	COLO	0.763	52	
398	WEST PALM BEACH	FLA	0.878	381	458	FARGO	ND	0.760	326	
399	CRANSTON	RI	0.877	396	459	MIDDLETOWN	CONN	0.759	57	
400	TEMPLE	TEX	0.875	430	460	COLUMBIA	MO	0.758	239	
401	TALLAHASSEE	FLA	0.875	79	461	JACKSON	MISS	0.758	235	
402	HUNTINGTON PARK	CAL	0.875	24	462	JACKSON	MISS	0.755	478	
403	GLENDALE	CAL	0.875	23	463	LAURETOS	WIS	0.748	425	
404	WACO	TEX	0.874	432	464	AUSTIN	TEX	0.746	416	
405	STOUS FALLS	SD	0.874	407	465	TOPEKA	KAN	0.746	154	
406	MIAMI BEACH	FLA	0.873	74	466	OKLAHOMA CITY	OKLA	0.743	365	
407	JEFFERSON CITY	MO	0.872	241	467	EL PASO	TEX	0.742	421	
408	FORT LAUDERDALE	FLA	0.872	68	468	PALO ALTO	CAL	0.723	30	
409	WICHITA FALLS	TEX	0.871	433	469	ROCHESTER	MINN	0.718	228	
410	SAN JOSE	CAL	0.870	41	470	ABILENE	TEX	0.710	414	
411	RAPID CITY	SD	0.869	406	471	TUSCALOOSA	ALA	0.686	287	
412	NORMAL	CONN	0.862	61	472	SANTA FE	NM	0.632	364	
413	MEMPHIS	FLA	0.861	80	473	NORMAN	OKLA	0.538	387	
414	WATERLOO	TENN	0.861	412						
415	WATERLOO	IOWA	0.858	150						
416	DAYTONA BEACH	FLA	0.855	67						
417	LANTON	OKLA	0.851	362						
418	GRAND FORKS	ND	0.851	327						
419	KALAMAZOO	MICH	0.850	21						

CITIES RANKED BY 1970 MORTALITY RATIO-DISEASES OF THE HEART										1970	STATE		1970
RANK	CITY	STATE	MORT.	RAT.	PAGE	(73)	RANK	CITY	STATE	MORT.	RAT.	PAGE	MORT.
1	NEUBURGH	NY	1.612	301			60	WARREN	OHIO	1.119	358		1.119
2	HOBOKEN	NJ	1.476	267			61	NEW ORLEANS	LA	1.118	168		1.118
3	EAST ST. LOUIS	ILL	1.464	103			62	CHARLESTON	SC	1.115	402		1.115
4	JOHNSTOWN	PENN	1.428	379			63	HAZELTON	PENN	1.115	378		1.115
5	MONROSTOWN	MD	1.390	385			64	BREMERTON	WASH	1.113	449		1.113
6	NEWPORT	KY	1.363	160			65	YORK	PENN	1.113	395		1.113
7	NEWARK	NJ	1.352	157			66	SPARTANBURG	SC	1.107	405		1.107
8	NEWARK	NY	1.308	157			67	HYANDOTTE	MICH	1.107	225		1.107
9	NEWARK	CT	1.293	256			68	ERIE	PENN	1.104	376		1.104
10	NEWARK	NJ	1.291	261			69	PETERSBURG	VA	1.102	444		1.102
11	JERSEY CITY	NJ	1.266	269			70	PENSACOLA	FLA	1.100	77		1.100
12	LACKAWANNA	NY	1.284	298			71	ALBANY	PENN	1.099	372		1.099
13	CUMBERLAND	MD	1.277	174			72	BELEVILLE	ILL	1.093	195		1.093
14	CHICAGO	ILL	1.270	99			73	MUNICIPAL	IND	1.092	263		1.092
15	AUGUSTA	GA	1.269	85			74	IRVINGTON	NJ	1.092	198		1.092
16	ALEXANDRIA	LA	1.268	163			75	HAUKEGAN	ILL	1.087	117		1.087
17	SUPERIOR	WIS	1.264	476			76	SPRINGFIELD	ILL	1.084	117		1.084
18	ATLANTIC CITY	NJ	1.262	257			77	COMPTON	CAL	1.082	21		1.082
19	ZANESVILLE	OHIO	1.234	360			78	PORTSMOUTH	OHIO	1.080	352		1.080
20	WILKES-BARRE	PENN	1.223	392			79	LIMA	OHIO	1.078	343		1.078
21	KEARNY	NJ	1.223	270			80	HUNTING PARK	CAL	1.078	24		1.078
22	SCRANTON	PENN	1.222	389			81	MOBILE	ALA	1.077	5		1.077
23	MCKEESPORT	PENN	1.207	382			82	TRENTON	NJ	1.076	281		1.076
24	ANISTON	ALA	1.206	1			83	ALBANY	NY	1.075	288		1.075
25	CHESTER	PENN	1.193	374			84	WINSTON-SALEM	NC	1.074	325		1.074
26	CICERO	ILL	1.188	100			85	NEWPORT	RI	1.074	397		1.074
27	COLUMBIA	SC	1.185	403			86	LERANON	PENN	1.072	381		1.072
28	WCONSOCKET	RI	1.184	401			87	UTICA	NY	1.072	311		1.072
29	CLARKSBURG	WV	1.184	457			88	MOLINE	ILL	1.071	111		1.071
30	CHARLESTON	WV	1.182	456			89	AUBURN	NY	1.070	290		1.070
31	SCHENECTADY	NY	1.181	308			90	REVERE	MASS	1.069	199		1.069
32	LOWELL	MASS	1.180	189			91	JOLIET	ILL	1.066	108		1.066
33	HARRISBURG	PENN	1.179	377			92	CHELSEA	MASS	1.064	180		1.064
34	PITTSBURGH	PENN	1.174	387			93	BAY CITY	MICH	1.064	208		1.064
35	PAIDUCAH	KY	1.169	162			94	BUTTE	MO	1.064	249		1.064
36	WASHINGTON	PENN	1.166	391			95	ST. LOUIS	MO	1.064	461		1.064
37	SAVANNAH	GA	1.164	90			96	PARKERSBURG	WV	1.064	121		1.064
38	FAYETTEVILLE	NC	1.161	319			97	EAST CHICAGO	IND	1.063	341		1.063
39	ORANGE	NJ	1.158	276			98	HAMILTON	OHIO	1.062	283		1.062
40	MONROE	LA	1.158	167			99	WEST NEW YORK	NJ	1.060	187		1.060
41	UNION CITY	LA	1.153	282			100	HOLYOKE	MASS	1.059	187		1.059
42	CASTON	IND	1.152	468			101	BETHLEHEM	PENN	1.059	373		1.059
43	CASTON	PENN	1.152	375			102	GAOSEN	ALA	1.059	4		1.059
44	HAGERSTOWN	MD	1.152	175			103	SPRINGFIELD	OHIO	1.058	355		1.058
45	PERTH ANBOY	NJ	1.147	279			104	WATON	OHIO	1.057	331		1.057
46	ROCK ISLAND	ILL	1.139	116			105	MICHIGAN CITY	IND	1.057	431		1.057
47	BALTIMORE	MD	1.135	173			106	ALBANY	NY	1.057	431		1.057
48	TROY	NY	1.131	310			107	CLEVELAND	OHIO	1.055	339		1.055
49	LEWISTON	ME	1.131	171			108	PATTERSON	NJ	1.055	278		1.055
50	LEXINGTON	KY	1.128	158			109	STUEBENVILLE	OHIO	1.054	356		1.054
51	BELLEVILLE	NJ	1.127	259			110	DAYTON	OHIO	1.053	337		1.053
52	NEW CASTLE	PENN	1.127	383			111	WATERTOWN	NY	1.052	313		1.052
53	READING	PENN	1.125	388			112	LINCOLN PARK	MICH	1.051	219		1.051
54	SHARON	PENN	1.125	350			113	RECONDO BEACH	CAL	1.051	33		1.051
55	PASSAIC	NJ	1.124	277			114	GRANITE CITY	ILL	1.050	107		1.050
56	BUFFALO	NY	1.123	292			115	BATTLE CREEK	MICH	1.049	207		1.049
57	MASSILLON	OHIO	1.123	347			116	GARY	IND	1.048	125		1.048
58	HAMTRAC	MICH	1.122	214			117	LOUISVILLE	KY	1.047	159		1.047
59	MAYWOOD	ILL	1.121	110			118	NORFOLK	VA	1.045	443		1.045
							119	NEW BEDFORD	MASS	1.044	194		1.044

RANK	CITY	STATE	1970		(1970 MORTALITY RATIO-CONT.)		RANK	CITY	STATE	1970	
			MORT.	RAT.	PAGE	(74)				MORT.	RAT.
120	PAMTUCKET	RI	1-043	398			180	SYRACUSE	NY	0-988	309
121	KANKAKEE	ILL	1-039	109			181	LINDEN	NJ	0-987	271
122	PORTSMOUTH	VA	1-037	445			182	ALLIANCE	OHIO	0-984	329
123	BARBERTON	OHIO	1-036	330			183	KEY WEST	FLA	0-984	71
124	SAGINAW	MICH	1-034	224			184	TOLEDO	OHIO	0-983	357
125	JACKSON	MICH	1-033	216			185	REICHMOND	VA	0-982	446
126	KOKOMO	IND	1-032	128			186	ROCKY MOUNT	NC	0-981	323
127	ALTON	ILL	1-032	93			187	NIAGARA FALLS	NY	0-980	304
128	COLUMBUS	GA	1-032	86			188	COLUMBUS	OHIO	0-979	335
129	BLOOMINGTON	ILL	1-031	277			189	MANFIELD	OHIO	0-979	345
130	GREENVILLE	MISS	1-030	233			190	BRCKTON	MASS	0-979	178
131	WILLIAMSPORT	PENN	1-029	594			191	EAU CLAIRE	WIS	0-979	465
132	WHEELING	WV	1-029	462			192	WILMINGTON	NC	0-974	324
133	WINNEMAN	OHIO	1-028	352			193	CHARLOTTE	NC	0-973	387
134	WALTON	ALA	1-028	352			194	LAMAR	MISS	0-972	136
135	SALENT ROUGE	PENN	1-027	371			195	RICHLAND	IND	0-972	135
136	ALBANY	ILL	1-027	96			196	WATERBURY	CONN	0-971	135
137	HAMMOND	IND	1-027	126			197	ROSTON	MASS	0-968	177
138	TERRE HAUTE	IND	1-025	137			198	WYCHBURG	VA	0-966	441
139	QUINCY	ILL	1-025	114			199	JOHNSON CITY	TENN	0-965	410
140	ALQUIPPA	PENN	1-025	370			200	NORWOOD	OHIO	0-964	350
141	LANCASTER	PENN	1-025	380			201	EVERETT	MASS	0-964	182
142	GARFIELD	NJ	1-025	265			202	YAKIMA	ILL	0-964	94
143	GALVESTON	TEX	1-025	423			203	AURORA	OHIO	0-963	346
144	ROME	NY	1-022	307			204	MARTIN	MASH	0-960	455
145	AMSTERDAM	NY	1-020	289			205	SANDUSKY	OHIO	0-960	353
146	SACRAMENTO	CAL	1-020	37			206	LYNN	MASS	0-960	190
147	HOT SPRINGS	ARK	1-019	11			207	SHREVEPORT	LA	0-960	169
148	SOMERVILLE	MASS	1-019	201			208	EVANSVILLE	IND	0-957	123
149	LOCKPORT	NY	1-017	299			209	WORCESTER	MASS	0-957	205
150	FOND DU LAC	WIS	1-017	466			210	WANCHESTER	PENN	0-956	454
151	ELMIRA	NY	1-016	293			211	PHILADELPHIA	PENN	0-956	386
152	ELIZABETH	NJ	1-015	264			212	LORAIN	OHIO	0-955	344
153	MACON	GA	1-013	88			213	NEW HAVEN	CONN	0-955	59
154	DULUTH	MINN	1-010	226			214	MORGANTOWN	WV	0-954	460
155	GREENVILLE	SC	1-009	404			215	PORT HURON	MICH	0-954	222
156	PORTLAND	ME	1-008	172			216	BAKERSFIELD	CAL	0-953	17
157	DETROIT	MICH	1-007	210			217	ELYRIA	OHIO	0-952	339
158	NEW YORK CITY	NY	1-007	303			218	NEWARK	OHIO	0-952	349
159	PROVIDENCE	RI	1-005	295			219	ROME	GA	0-948	89
160	JAPES TOWN	NY	1-003	296			220	SAN LEANDRO	CAL	0-947	262
161	PINE BLUFF	ARK	1-003	14			221	LITTLE ROCK	ARK	0-946	12
162	NORTH LITTLE ROCK	ARK	1-002	13			222	EUCLEID	OHIO	0-945	340
163	VALLEY STREAM	NY	1-002	312			223	BLOOMINGTON	IND	0-944	120
164	KANSAS CITY	KAN	1-001	152			224	PEORIA	ILL	0-944	113
165	YONKERS	NY	1-000	315			225	ATHENS	GA	0-941	83
166	YONKERS	NY	1-000	359			226	JOPLIN	MO	0-941	242
167	YOUNGSTOWN	OHIO	0-998	181			227	NASHVILLE	TENN	0-941	413
168	CHICOPEE	MASS	0-998	184			228	DES MOINES	IOWA	0-939	143
169	FITCHBURG	MASS	0-997	212			229	LAFAYETTE	LA	0-939	165
170	FLINT	MICH	0-996	453			230	DEARBORN	MICH	0-936	209
171	TACOMA	WASH	0-995	453			231	MALDEN	MASS	0-932	191
172	MUSKOGEE	MICH	0-994	101			232	BURLINGTON	CONN	0-931	53
173	BELLE	ALA	0-993	2			233	CORPUS CHRISTI	TEX	0-930	437
174	BEVERLY	MASS	0-992	161			234	NEW ALBANY	IND	0-928	134
175	BEVERLY	MASS	0-992	161			235	MAUSAU	WIS	0-928	477
176	BLOOMFIELD	RI	0-991	400			236	BURLINGTON	IOWA	0-927	138
177	WARWICK	RI	0-990	274			237				
178	NEW BRUNSWICK	NJ	0-989	183			238				
179	FALL RIVER	MASS	0-989	183			239				

1970				1970 MORTALITY RATIO= CONT..)				1970			
RANK	CITY	STATE	MORT. RAT.	PAGE	(75)	RANK	CITY	STATE	MORT. RAT.	PAGE	
240	GALESBURG	ILL	0.927	106		300	HATTIESBURG	MISS	0.878	234	
241	NEW LONDON	CONN	0.922	60		301	INGLEWOOD	CAL	0.878	25	
242	ASHEVILLE	NC	0.922	316		302	FORT WAYNE	IND	0.876	124	
243	OSKOSH	WIS	0.920	473		303	HIGHLAND PARK	MICH	0.875	215	
244	KINGSTON	NY	0.920	297		304	SOUTH BEND	IND	0.875	136	
245	BELOIT	WIS	0.920	464		305	NASHUA	NH	0.875	256	
246	COUNCIL BLUFFS	IOWA	0.920	141		306	BELLINGHAM	WASH	0.874	448	
247	KENOSHA	WIS	0.920	468		307	HIGH POINT	NC	0.873	321	
248	SAVING	MO	0.918	264		308	PANAMA CITY	FLA	0.873	76	
249	SAVING JOSEPH	LA	0.918	166		309	JACKSONVILLE	FLA	0.873	70	
250	DISTRICT OF COLUMBIA	LA	0.918	166		310	BEAUMONT	TEX	0.872	417	
251	HAVERHILL	MASS	0.918	186		311	BOISE	ID	0.871	91	
252	NEWPORT NEWS	VA	0.917	442		312	LOS ANGELES	CAL	0.870	27	
253	MANITOWOC	WIS	0.916	471		313	MOUNT VERNON	NY	0.869	300	
254	SHERIDYGAN	WIS	0.915	475		314	EAST CLEVELAND	OHIO	0.867	358	
255	BINGHAMTON	NY	0.914	291		315	LANSING	MICH	0.867	218	
256	BLOXT	MISS	0.914	232		316	LANCASTER	PA	0.866	52	
257	HARTFORD	CONN	0.913	55		317	PUERTO RICO	PR	0.866	462	
258	ELKHART	IND	0.911	122		318	GREEN BAY	WIS	0.864	447	
259	LONG BEACH	CAL	0.911	26		319	ROCKFORD	ILL	0.863	447	
260	WILKINSBURG	PENN	0.911	393		320	AMARILLO	TEX	0.861	415	
261	FERNDALE	MICH	0.911	211		321	WEST ELLIS	WIS	0.860	479	
262	MEMPHIS	TENN	0.910	412		322	MONTGOMERY	ALA	0.860	6	
263	LAFAYETTE	IND	0.910	129		323	EVERETT	WASH	0.859	450	
264	DURHAM	NC	0.907	318		324	RENO	NEV	0.858	253	
265	RACINE	WIS	0.907	474		325	LAWTON	OKLA	0.857	362	
266	NUTLEY	NJ	0.903	275		326	SALEM	MASS	0.856	204	
267	PARMA	OHIO	0.903	351		327	WALTHAM	MASS	0.855	204	
268	DURQUEE	IOWA	0.902	144		328	BEVERLY HILLS	CAL	0.855	19	
269	MERIDEN	CONN	0.901	56		329	HUNTINGTON	WV	0.855	459	
270	ASHLAND	KY	0.901	156		330	SANTA MONICA	CAL	0.854	46	
271	SOUTH GATE	CAL	0.900	47		331	BIRMINGHAM	ALA	0.854	3	
272	CLEVELAND HEIGHTS	OHIO	0.900	334		332	TUCSON	ARIZ	0.853	9	
273	JEFFERSON CITY	MO	0.900	241		333	WHITE PLAINS	NY	0.853	314	
274	MILWAUKEE	WIS	0.899	472		334	TYLER	TEX	0.852	431	
275	OTTUMWA	IOWA	0.898	148		335	RALEIGH	NC	0.852	322	
276	CLINTON	IOWA	0.897	140		336	CHEYENNE	WY	0.852	480	
277	WACO	TEX	0.897	432		337	JACKSON	TENN	0.851	409	
278	PONTIAC	MICH	0.897	221		338	GLOUCESTER	MASS	0.850	185	
279	HOUSTON	TEX	0.895	824		339	STOCKTON	CAL	0.849	48	
280	MIDDLETON	OHIO	0.893	348		340	DAYTONA BEACH	FLA	0.848	67	
281	WILKINSBURG	PA	0.893	266		341	MASON CITY	IA	0.848	147	
282	GRAND RAPIDS	MICH	0.891	213		342	ROYAL OAK	MICH	0.848	223	
283	LA GRANGE	GA	0.891	87		343	ALAMEDA	CAL	0.847	15	
284	DENVORT	IOWA	0.890	142		344	CUYAHOGA FALLS	OHIO	0.847	336	
285	MANCHESTER	NH	0.890	255		345	OKLAHOMA CITY	OKLA	0.846	365	
286	SPRINGFIELD	MASS	0.887	202		346	BRISTOL	CONN	0.845	54	
287	BANGOR	ME	0.886	170		347	CEDAR RAPIDS	IOWA	0.845	139	
288	AKRON	OHIO	0.886	328		348	ROCKFORD	ILL	0.844	13	
289	ANDERSON	IND	0.884	119		349	ALABAMA	AL	0.844	21	
290	MEDFORD	MASS	0.884	192		350	SAN JOSE	CAL	0.844	384	
291	VALLEJO	CAL	0.884	49		351	NEW KENSINGTON	PENN	0.844	384	
292	OAK PARK	ILL	0.883	112		352	PLAINFIELD	NJ	0.844	280	
293	OKLA	OKLA	0.882	361		353	LAKWOOD	OHIO	0.843	342	
294	ROCHESTER	NY	0.881	306		354	OWAHA	NEB	0.843	252	
295	ALBANY	GA	0.881	82		355	SHAKER HEIGHTS	OHIO	0.841	354	
296	DANVILLE	VA	0.880	440		356	HUTCHINSON	KAN	0.840	151	
297	SPOKANE	WASH	0.880	452		357	TEMPLE	TEX	0.839	430	
298	DALLAS	TEX	0.879	420		358	MICHITA	KAN	0.837	155	
299	SALEM	ORE	0.878	369		359	SAN ANGELO	TEX	0.835	428	

RANK	CITY	STATE	1970		RANK	(1970 MORTALITY RATIO CONT.)		CITY	STATE	1970	
			MORT.	RAT.		(76)				MORT.	RAT.
360	REDWOOD CITY	CAL	0.834	34	420	STAMFORD	CONN	0.767	62		
361	WATERLOO	IOWA	0.834	150	421	QUINCY	MASS	0.766	198		
362	TORRINGTON	CONN	0.833	63	422	INDEPENDENCE	MO	0.765	240		
363	MIAMI	FLA	0.833	73	423	MIAMI BEACH	FLA	0.764	74		
364	POCATELLO	ID	0.833	92	424	SAN DIEGO	CAL	0.760	39		
365	PORTLAND	ORE	0.829	368	425	LUBBOCK	TEX	0.760	426		
366	GREENSBORO	NC	0.829	320	426	GREAT FALLS	MONT	0.759	250		
367	SEATTLE	WASH	0.828	451	427	GAINESVILLE	FLA	0.756	69		
368	DECATUR	ILL	0.828	102	428	RIVERSIDE	CAL	0.756	36		
369	LAUREL	MISS	0.826	236	429	TOPEKA	KAN	0.756	154		
370	ST. PAUL	MINN	0.825	230	430	CRANSTON	RI	0.756	396		
371	ALHAMBRA	CAL	0.825	16	431	EVANSTON	ILL	0.755	105		
372	SAN FRANCISCO	CAL	0.823	40	432	BEVERLY	MASS	0.751	176		
373	FORT WORTH	TEX	0.823	422	433	RAPID CITY	SD	0.748	406		
374	CHARLOTTEVILLE	VA	0.822	439	434	COLORADO SPRINGS	COLO	0.747	50		
375	MUSKOGEE	OKLA	0.822	363	435	LA CROSSE	WIS	0.746	469		
376	BURBANK	CAL	0.822	20	436	PROVO	UTAH	0.745	435		
377	SAN BERNARDINO	CAL	0.821	38	437	PASADENA	TEX	0.745	31		
378	MONTCLAIR	NJ	0.821	272	438	AUSTIN	TEX	0.739	416		
379	MINNEAPOLIS	MINN	0.820	227	439	JACKSON	MISS	0.737	235		
380	MISHAWAKA	IND	0.820	132	440	WINDONA	MINN	0.735	231		
381	NEW BRITAIN	CONN	0.815	58	441	NEWTON	MASS	0.735	195		
382	STOUX CITY	CONN	0.812	161	442	TAMPA	FLA	0.734	80		
383	NEWARK	IOWA	0.811	149	443	MIDDLETOWN	CONN	0.733	57		
384	KNOXVILLE	TENN	0.811	269	444	SAN MATEO	CAL	0.733	43		
385	KEOSAUQUA	IA	0.811	111	445	LYNNCOO	CAL	0.727	43		
386	TAUNTON	MASS	0.810	203	446	BROMSVILLE	TEX	0.726	418		
387	CHAMPAIGN	ILL	0.809	98	447	KANSAS CITY	MO	0.723	243		
388	FREMONT	CAL	0.806	22	448	UNIVERSITY CITY	MO	0.721	247		
389	POMONA	CAL	0.806	32	449	APPLETON	WIS	0.717	463		
390	PITTSFIELD	MASS	0.804	197	450	SANTA BARBARA	UTAH	0.714	436		
391	ROSWELL	NM	0.804	286	451	SALT LAKE CITY	UTAH	0.710	436		
392	MADISON	WIS	0.804	470	452	ABILENE	TEX	0.700	416		
393	EUGENE	ORE	0.802	367	453	CHICAGO	ILL	0.700	254		
394	VICKSBURG	MISS	0.802	238	454	ANN ARBOR	MICH	0.699	206		
395	RICHMOND	CAL	0.801	35	455	ST. CLOUD	MINN	0.694	229		
396	OGDEN	UTAH	0.801	434	456	FORT DODGE	IOWA	0.693	145		
397	KALAMAZOO	MICH	0.798	217	457	FARGO	ND	0.687	326		
398	MELROSE	MASS	0.797	193	458	NORTHAMPTON	MASS	0.686	196		
399	INDIANAPOLIS	IND	0.795	127	459	EL PASO	TEX	0.671	421		
400	ALBUQUERQUE	NM	0.794	285	460	BILLINGS	MONT	0.668	248		
401	DENVER	COLO	0.791	51	461	TALLAHASSEE	FLA	0.666	79		
402	WEST PALM BEACH	FLA	0.789	81	462	BERKELEY	CAL	0.662	18		
403	GRAND FORKS	ND	0.789	327	463	TUSCALOOSA	ALA	0.662	7		
404	FORT SMITH	ARK	0.788	10	464	LINCOLN	NEB	0.659	251		
405	PHOENIX	ARIZ	0.787	8	465	LAREDO	TEX	0.658	425		
406	LAKELAND	FLA	0.786	72	466	SALINA	KAN	0.651	153		
407	ELGIN	ILL	0.785	104	467	SANTA FE	NM	0.643	287		
408	SIOUX FALLS	SD	0.784	407	468	NORMAN	OKLA	0.639	364		
409	MICHITA FALLS	TEX	0.782	433	469	PALO ALTO	CAL	0.618	30		
410	SANTA ANA	CAL	0.782	44	470	ROCHESTER	MINN	0.617	228		
411	PORT ARTHUR	TEX	0.779	427	471	EAST ORANGE	NJ	0.607	263		
412	NEW ROCHELLE	NY	0.777	302	472	IOWA CITY	IOWA	0.602	146		
413	WAUWATOSA	WIS	0.772	478	473	COLUMBIA	MO	0.594	239		
414	GLENDALE	CAL	0.772	23							
415	SPRINGFIELD	MO	0.772	246							
416	FORT LAUDERDALE	FLA	0.771	68							
417	MERIDIAN	MISS	0.771	237							
418	ST. PETERSBURG	FLA	0.768	78							
419	SAN ANTONIO	TEX	0.768	429							

CITIES RANKED BY 1950 MORTALITY RATIO-NON CARDIOVASCULAR RENAL DISEASES

RANK	CITY	STATE	1950		RANK	CITY	STATE	MORT. RAT.	
			MORT.	PAGE				MORT.	PAGE
(77)									
1	BRNNSVILLE	TEX	2,361	418	60	PADUCAH	KY	1,359	162
2	BAKERSFIELD	CAL	2,218	17	61	TERRE HAUTE	IND	1,358	137
3	BUTTE	MONT	2,164	249	62	STEUBENVILLE	OHIO	1,352	356
4	LAREDO	TEX	2,094	425	63	AMSTERDAM	NY	1,349	289
5	TUCSON	ARIZ	2,071	9	64	SPRINGFIELD	ILL	1,349	117
6	PHCENIX	ARIZ	1,961	8	65	SAN ANGELO	TEX	1,348	428
7	EL PASO	TEX	1,712	421	66	AMARILLO	TEX	1,347	415
8	SANTA FE	NM	1,697	287	67	BAY CITY	MICH	1,346	208
9	JOHNSTOWN	PENN	1,657	379	68	ROME	GA	1,345	89
10	VALLEJO	CAL	1,598	49	69	FAIRMONT	WV	1,344	458
11	HOT SPRINGS	ARK	1,592	11	70	WILMINGTON	NC	1,343	324
12	WHEELING	WV	1,571	402	71	DANVILLE	VA	1,342	440
13	WAPLESTON	SC	1,573	88	72	COVINGTON	LA	1,337	157
14	SAN ANTONIO	TEX	1,572	429	73	PITTSBURGH	PENN	1,334	387
15	MILKES-BARRE	PENN	1,569	392	74	LEBANON	PENN	1,332	381
16	TAMPA	FLA	1,556	80	75	GARY	IND	1,332	125
17	STOCKTON	CAL	1,549	48	76	CHEYENNE	WY	1,331	480
18	CHARLESTON	WV	1,546	456	77	YAKIMA	WASH	1,329	455
19	PARKERSBURG	WV	1,539	461	78	PUEBLO	COLOR	1,325	52
20	WASHINGTON	PENN	1,536	391	79	SAVANNAH	GA	1,323	90
21	NASHVILLE	TENN	1,531	413	80	LOUISVILLE	KY	1,323	159
22	SAN BERNARDINO	CAL	1,529	38	81	PETERSBURG	VA	1,321	444
23	NEWPORT	KY	1,525	160	82	ATLANTIC CITY	NJ	1,317	257
24	CHATTANOOGA	TENN	1,509	408	83	JACKSON	MICH	1,314	216
25	GREENVILLE	SC	1,494	407	84	EAST ST. LOUIS	ILL	1,314	103
26	RENC	NEV	1,490	253	85	GREAT FALLS	MONT	1,312	250
27	LACKAMANNA	NY	1,489	298	86	NEWARK	NJ	1,311	273
28	JACKSONVILLE	FLA	1,485	70	87	CANTON	OHIO	1,310	331
29	ALBUQUERQUE	NM	1,475	285	88	HAMILTON	OHIO	1,310	341
30	ANNISTON	ALA	1,472	1	89	GALVESTON	TEX	1,310	423
31	JOLIET	ILL	1,471	108	90	SPARTANBURG	SC	1,305	405
32	SCRANTON	PENN	1,468	389	91	PORTSMOUTH	OHIO	1,305	352
33	EUGENE	ORE	1,460	367	92	SACRAMENTO	CAL	1,305	37
34	SALEM	MASS	1,456	200	93	DAYTON	OHIO	1,304	337
35	CHESTER	PENN	1,441	374	94	ASHLAND	KY	1,302	156
36	ROSWELL	NM	1,440	286	95	JOPLIN	MO	1,299	242
37	ALEXANDRIA	LA	1,434	163	96	ST. CLOUD	MINN	1,298	229
38	EAST CHICAGO	IND	1,430	121	97	MANSFIELD	OHIO	1,296	345
39	KEY WEST	FLA	1,429	71	98	NEW CASTLE	PENN	1,296	383
40	PENSACOLA	FLA	1,424	77	99	MERIDIAN	MISS	1,293	237
41	HUNTINGTON	WV	1,423	459	100	MUSKOGON	MICH	1,292	220
42	NEWPORT NEWS	VA	1,420	442	101	TRCY	NY	1,291	310
43	BESSEMER	ALA	1,419	92	102	NORTHAMPTON	MASS	1,289	196
44	CHICAGO	ILL	1,405	26	103	LAUREL	MISS	1,289	236
45	VICKSBURG	MISS	1,396	238	104	CINCINNATI	OHIO	1,287	332
46	PORT HURON	MICH	1,392	222	105	KOKOMO	IND	1,286	128
47	COLUMBUS	GA	1,387	86	106	COLCRADO SPRINGS	COLOR	1,285	50
48	CLARKSBURG	WV	1,386	457	107	SEATTLE	WASH	1,284	451
49	FRESNO	CAL	1,383	22	108	FALL RIVER	MASS	1,282	183
50	BILLINGS	MONT	1,383	248	109	BOSTON	MASS	1,281	177
51	HAZELTON	PENN	1,380	378	110	ALLIANCE	OHIO	1,279	329
52	GREENVILLE	MISS	1,375	233	111	BOISE	ID	1,279	91
53	LORAIN	OHIO	1,372	344	112	HOUSTON	TEX	1,276	424
54	HOBOKEN	NJ	1,370	267	113	MIDDLETOWN	OHIO	1,273	348
55	NEW KENSINGTON	PENN	1,370	384	114	PERTH AMBOY	NY	1,271	279
56	JERSEY CITY	NJ	1,368	269	115	ALBANY	NJ	1,267	288
57	HAWTRAMCK	MICH	1,364	214	116	CLEVELAND	OHIO	1,267	333
58	KNOXVILLE	TENN	1,360	411	117	JACKSON	TENN	1,267	409
59	CORPUS CHRISTI	TEX	1,360	419	118	NEW ALBANY	IND	1,266	134
					119	EASTON	PENN	1,264	375

1950 MORT. RAT. (76)				1950 MORT. RAT.			
RANK	CITY	STATE	RANK	CITY	STATE	RANK	CITY
120	TOLEDO	OHIO	180	NEW ORLEANS	LA	180	NEW ORLEANS
121	MORGANTOWN	WV	181	DANVILLE	ILL	181	DANVILLE
122	COLUMBIA	SC	182	FORT WAYNE	IND	182	FORT WAYNE
123	LIMA	OHIO	183	BREMERTON	WASH	183	BREMERTON
124	CAMDEN	NJ	184	TULSA	OKLA	184	TULSA
125	BELLEVILLE	ILL	185	HARTFORD	CONN	185	HARTFORD
126	ROCHESTER	NY	186	CHICAGO	ILL	186	CHICAGO
127	FAYETTEVILLE	NC	187	SPRINGFIELD	MASS	187	SPRINGFIELD
128	SANDUSKY	OHIO	188	SHREVEPORT	LA	188	SHREVEPORT
129	INDIANAPOLIS	IND	189	PHILADELPHIA	PA	189	PHILADELPHIA
130	LANSING	MICH	190	ALBANY	NY	190	ALBANY
131	KANSAS CITY	MO	191	SPRINGFIELD	MICH	191	SPRINGFIELD
132	PEORIA	ILL	192	BATTLE CREEK	MICH	192	BATTLE CREEK
133	LEXINGTON	KY	193	SUPERIOR	WIS	193	SUPERIOR
134	YACHTON	GA	194	BANGOR	ME	194	BANGOR
135	AUGUSTA	GA	195	ROCK ISLAND	ILL	195	ROCK ISLAND
136	HAGERSTOWN	MD	196	NEW YORK CITY	NY	196	NEW YORK CITY
137	MUNCIE	IND	197	STOUC CITY	IOWA	197	STOUC CITY
138	SALINA	KAN	198	NOFOLK	VA	198	NOFOLK
139	RICHMOND	IND	199	DENVER	COLO	199	DENVER
140	KANSAS CITY	KAN	200	DISTRICT OF COLUMBIA	DC	200	DISTRICT OF COLUMBIA
141	LUBROCK	TEX	201	MUSKOGEE	OKLA	201	MUSKOGEE
142	ST. LOUIS	MO	202	ELMIRA	NY	202	ELMIRA
143	YOUNGSTOWN	OHIO	203	READING	PENN	203	READING
144	WYANDOTTE	MICH	204	ELIZABETH	NJ	204	ELIZABETH
145	RICHMOND	VA	205	JACKSON	MISS	205	JACKSON
146	ZANESVILLE	OHIO	206	OMENSBORO	OHIO	206	OMENSBORO
147	BLOOMINGTON	ILL	207	ELYRIA	OHIO	207	ELYRIA
148	GRAND FORKS	ND	208	PANTUCKET	RI	208	PANTUCKET
149	HATTIESBURG	MISS	209	ALBUQUERQUE	NM	209	ALBUQUERQUE
150	ALBANY	GA	210	BIRMINGHAM	ALA	210	BIRMINGHAM
151	BEAUMONT	TEX	211	DAYTON	OHIO	211	DAYTON
152	TRENTON	NJ	212	MASSILLON	OHIO	212	MASSILLON
153	DURHAM	NC	213	MONTGOMERY	ALA	213	MONTGOMERY
154	BALTIMORE	MD	214	WICHITA	KAN	214	WICHITA
155	WAUKEGAN	ILL	215	LAKE CHARLES	LA	215	LAKE CHARLES
156	CHICAGO	ILL	216	MEMPHIS	TENN	216	MEMPHIS
157	RIVERSIDE	CAL	217	TACOMA	WA	217	TACOMA
158	HARRISBURG	PENN	218	ROCKFORD	ILL	218	ROCKFORD
159	PHILADELPHIA	PENN	219	DES MOINES	IOWA	219	DES MOINES
160	SAN FRANCISCO	CAL	220	ABILENE	TEX	220	ABILENE
161	PASSAIC	NJ	221	BARTON	MO	221	BARTON
162	WHEELING	WV	222	LAFAYETTE	LA	222	LAFAYETTE
163	NEWPORT	RI	223	MIAMI	FLA	223	MIAMI
164	BUFFALO	NY	224	GREEN BAY	WIS	224	GREEN BAY
165	MARION	IND	225	CHICAGO	ILL	225	CHICAGO
166	DETROIT	MICH	226	LAFAYETTE	LA	226	LAFAYETTE
167	WHEELING	WV	227	BELLINGHAM	WASH	227	BELLINGHAM
168	MCKEESPORT	PENN	228	WATERLOO	ONT	228	WATERLOO
169	EVANSTON	ILL	229	PATERSON	NJ	229	PATERSON
170	WORTH	TEX	230	FOND DU LAC	WIS	230	FOND DU LAC
171	WORTH	TEX	231	COLUMBUS	OHIO	231	COLUMBUS
172	WARREN	PENN	232	ST. LOUIS	MO	232	ST. LOUIS
173	WARREN	PENN	233	ELKHART	IND	233	ELKHART
174	LEWISTON	ME	234	ALTON	ILL	234	ALTON
175	PROVIDENCE	RI	235	WARREN	OHIO	235	WARREN
176	KINGSTON	NY	236	ST. PAUL	MINN	236	ST. PAUL
177	SAN LEANDRO	CAL	237	ST. PAUL	MINN	237	ST. PAUL
178	NEW BRUNSWICK	NJ	238	PORTLAND	ORE	238	PORTLAND
179	NEWBURGH	NY	239	ASHEVILLE	NC	239	ASHEVILLE

RANK	CITY	STATE	1950		(1950 MORTALITY RATIO-CONT.)		RANK	CITY	STATE	1950	
			MORT.	RAT.	PAGE	(75)				MORT.	RAT.
240	RALEIGH	NC	1.144	322			300	WICHITA FALLS	TEX	1.088	433
241	AURORA	ILL	1.143	94			301	UNION CITY	NJ	1.087	282
242	SANTA BARBARA	CAL	1.143	45			302	LAWRENCE	MASS	1.087	188
243	VANCOUVER	WASH	1.142	454			303	FITCHBURG	MASS	1.086	184
244	KANKAKEE	ILL	1.141	109			304	MILWAUKEE	WIS	1.086	272
245	FORT DODGE	IOWA	1.139	145			305	MILWAUKEE	WIS	1.083	276
246	MANCHESTER	NH	1.138	255			306	SEARUSSE	MASS	1.081	270
247	DURHAM	NC	1.137	318			307	SEARUSSE	MASS	1.081	209
248	CLINTON	IOWA	1.136	140			308	SPRINGFIELD	WASH	1.080	452
249	SPRINGFIELD	MASS	1.136	202			309	GRANITE CITY	ILL	1.080	107
250	MISHAWAKA	IND	1.134	132			310	FORT SMITH	ARK	1.079	10
251	GRAND RAPIDS	MICH	1.133	213			311	RICHMOND	CAL	1.079	35
252	MOLINE	ILL	1.132	111			312	NEW LONDON	CONN	1.078	60
253	NIAGARA FALLS	ILL	1.132	364			313	WILLIAMSPORT	PENN	1.078	394
254	CHELSEA	MASS	1.132	180			314	WARWICK	RI	1.077	400
255	DECATUR	ILL	1.129	102			315	NEW BEDFORD	MASS	1.076	194
256	MICHIGAN CITY	IND	1.128	131			316	AKRON	OHIO	1.075	328
257	GADSDEN	ALA	1.128	174			317	SANTA ANA	CAL	1.074	44
258	CUMBERLAND	MD	1.128	174			318	SAN DIEGO	CAL	1.074	39
259	WILMINGTON	NEB	1.128	252			319	BLOOMINGTON	IND	1.074	120
260	SAGINAW	MICH	1.127	224			320	MALDEN	MASS	1.073	191
261	MOBILE	ALA	1.127	5			321	DULUTH	MINN	1.073	226
262	SOUTH BEND	IND	1.126	136			322	REDONDO BEACH	CAL	1.072	33
263	HAMMOND	LA	1.124	167			323	CICERO	ILL	1.072	100
264	SALT LAKE CITY	UTAH	1.124	126			324	SAN JOSE	CAL	1.071	41
265	SPRINGFIELD	MO	1.123	436			325	GREENSBORO	NC	1.071	320
266	EVANSVILLE	IND	1.123	123			326	LOS ANGELES	CAL	1.070	27
267	CHARLOTTE	NC	1.122	317			327	REVERE	MASS	1.070	199
268	BETHLEHEM	PENN	1.121	373			328	POMONA	CAL	1.067	32
269	GAINSVILLE	FLA	1.120	69			329	RAPID CITY	SD	1.066	406
270	YONKERS	NY	1.118	315			330	RACINE	WIS	1.064	474
271	PORTSMOUTH	VA	1.116	445			331	OTTUMWA	IOWA	1.064	148
272	OKLAHOMA CITY	OKLA	1.116	365			332	QUINCY	ILL	1.063	114
273	LYNN	MASS	1.113	190			333	LOWELL	MASS	1.063	189
274	QUINCY	MASS	1.112	198			334	BRIDGEPORT	CONN	1.063	53
275	ORLANDO	FLA	1.111	75			335	DAYTONA BEACH	FLA	1.062	67
276	NEW HAVEN	CONN	1.110	59			336	TALLAHASSEE	FLA	1.062	79
277	SCHENECTADY	NY	1.109	308			337	MINNEAPOLIS	MINN	1.061	227
278	BINGHAMTON	NY	1.108	291			338	PONTIAC	MICH	1.056	424
279	ATHENS	GA	1.108	83			339	WEST ELLIS	WIS	1.056	478
280	MAUSAU	WIS	1.107	477			340	KALAMAZOO	MICH	1.055	217
281	INDEPENDENCE	MO	1.105	540			341	ST. JOSEPH	MO	1.055	244
282	NORRISTOWN	PENN	1.105	285			342	HIGHLAND PARK	MICH	1.055	215
283	SOMERVILLE	MASS	1.104	172			343	WORCESTER	MASS	1.054	205
284	PORTLAND	ME	1.104	172			344	OAKLAND	CAL	1.051	29
285	WATERBURY	CONN	1.101	64			345	LITTLE ROCK	ARK	1.050	12
286	MOANUKU	TEX	1.101	447			346	WAUKATOSA	WIS	1.046	478
287	ARTHUR	TEX	1.099	432			347	OGDEN	UTAH	1.046	434
288	FORT LAUDERDALE	FLA	1.098	427			348	LINDEN	NJ	1.045	271
289	DEARBORN	MICH	1.098	68			349	EAST ORANGE	ARK	1.045	263
290	DALLAS	TEX	1.097	209			350	PINE BLUFF	MASS	1.044	14
291	PLAINFIELD	NJ	1.097	420			351	HAVERHILL	MASS	1.043	186
292	NEW BRITAIN	CONN	1.095	58			352	WEST NEW YORK	NJ	1.043	283
293	LANTON	OKLA	1.094	362			353	BURLINGTON	VT	1.042	437
294	HARTFORD	CONN	1.093	55			354	ALTOONA	PENN	1.041	372
295	LYNCHBURG	VA	1.091	441			355	MELROSE	WIS	1.039	468
296	LA GRANGE	GA	1.089	87			356	COMPTON	CAL	1.039	193
297	HUTCHINSON	KAN	1.089	151			357	INGLEWOOD	CAL	1.038	25

(1950 MORTALITY RATIO-CONT.)				1950			
RANK	CITY	STATE	MORT. RAT. PAGE	RANK	CITY	STATE	MORT. RAT. PAGE
360	ROCHESTER	NY	1.038 306	420	ALAMEDA	CAL	0.950 15
361	BILOXI	MISS	1.037 232	421	GLOUCESTER	MASS	0.949 185
362	STAMFORD	CONN	1.036 62	422	TYLER	TEX	0.948 431
363	END	OKLA	1.034 361	423	LA CROSSE	WIS	0.946 465
364	NORWALK	CONN	1.033 61	424	MOUNT VERNON	NY	0.946 300
365	HACKENSACK	NJ	1.033 266	425	ELGIN	ILL	0.945 104
366	TAUNTON	MASS	1.031 203	426	GARFIELD	NJ	0.945 265
367	LOCKPORT	NY	1.031 299	427	BURBANK	CAL	0.942 220
368	AUSTIN	TEX	1.030 416	428	BATON ROUGE	LA	0.941 164
369	ORANGE	NJ	1.030 276	429	MERIDEN	CONN	0.941 56
370	FERRDALE	MICH	1.028 211	430	VALLEY STREAM	NY	0.936 312
371	CEDAR RAPIDS	IOWA	1.027 139	431	LINCOLN PARK	MICH	0.934 219
372	NORWOOD	OHIO	1.027 350	432	CUYAHOGA FALLS	OHIO	0.934 336
373	BROCKTON	MASS	1.025 178	433	OAK PARK	ILL	0.930 112
374	HOLYOKE	MASS	1.023 187	434	ROYAL OAK	MICH	0.924 223
375	NORTH LITTLE ROCK	ARK	1.023 13	435	MEDFORD	MASS	0.921 192
376	TOPEKA	KAN	1.021 154	436	EVANSTON	ILL	0.921 105
377	ROCKY MOUNT	NC	1.018 323	437	MONTCLAIR	NJ	0.921 22
378	HIGH POINT	NC	1.017 81	438	MIAMI BEACH	FLA	0.918 36
379	WEST PALM BEACH	FLA	1.017 171	439	PARMA	OHIO	0.915 351
380	CHAMPAGN	ILL	1.016 148	440	NUTLEY	NJ	0.912 275
381	COUNCIL BLUFFS	IOWA	1.012 111	441	COLUMBIA	MO	0.910 239
382	CHARLOTTEVILLE	VIRG	1.008 439	442	ROME	NY	0.908 307
383	APLETON	WIS	1.006 463	443	SALEM	ORE	0.906 369
384	SHEROYAN	WIS	0.998 475	444	ANN ARBOR	MICH	0.901 206
385	JACKSON CITY	MISS	0.997 410	445	SAN MATEO	CAL	0.898 43
386	GALLESBURG	ILL	0.997 106	446	ITHACA	NY	0.897 295
387	ALBANY	NY	0.997 7	447	EVERETT	MASS	0.897 182
388	TUSCALOOSA	ALA	0.997 7	448	WATERLOO	IOWA	0.891 150
389	BURLINGTON	NEB	0.997 251	449	MASON CITY	IOWA	0.885 147
390	LINCOLN	NEB	0.993 138	450	PALO ALTO	CAL	0.879 30
391	UTICA	NY	0.993 311	451	BELOIT	WIS	0.878 464
392	WHITE PLAINS	NY	0.985 314	452	CONCORD	NH	0.876 254
393	BRWYN	ILL	0.985 96	453	UNIVERSITY CITY	MO	0.871 247
394	RELEVILLE	NJ	0.985 259	454	WILKINSBURG	PENN	0.867 393
395	REDMOND CITY	CAL	0.984 34	455	GLENDALE	CAL	0.861 23
396	NEW ROCHELLE	NY	0.984 302	456	SOUTH GATE	CAL	0.852 47
397	CLIFTON	NJ	0.984 262	457	CLEVELAND HEIGHTS	OHIO	0.850 334
398	IOWA CITY	IOWA	0.984 146	458	BEVERLY	MASS	0.849 176
399	ALLENSTOWN	PENN	0.983 371	459	PASADENA	CAL	0.845 31
400	WALTHAM	MASS	0.980 204	460	NORMAN	OKLA	0.842 364
401	TEMPLE	TEX	0.977 430	461	EUCLID	OHIO	0.840 340
402	WINONA	MINN	0.976 231	462	CHICOOPEE	MASS	0.835 181
403	IRVINGTON	NJ	0.975 268	463	BERKELEY	CAL	0.822 18
404	SANTA MONICA	CAL	0.975 46	464	ST. PETERSBURG	FLA	0.820 78
405	NEWTON	MASS	0.973 195	465	LYNWOOD	CAL	0.795 28
406	AUBURN	NY	0.973 290	466	JEFFERSON CITY	MO	0.786 241
407	LANSING	MICH	0.972 218	467	CRANSTON	RI	0.778 396
408	BLOOMFIELD	NJ	0.970 260	468	PRCVO	UTAH	0.770 435
409	MADISON	WIS	0.970 470	469	SHAKER HEIGHTS	OHIO	0.767 354
410	EAST CLEVELAND	OHIO	0.970 338	470	ALHAMBRA	CAL	0.757 16
411	FARGO	ND	0.967 326	471	MIDDLETOWN	CONN	0.728 57
412	JAMESTOWN	NY	0.967 296	472	MIAMI BEACH	FLA	0.644 74
413	BRISTOL	CONN	0.965 54	473	BEVERLY HILLS	CAL	0.551 19
414	STIOUX FALLS	SD	0.963 407				
415	EAU CLAIRE	WIS	0.958 465				
416	MANITOWOC	WIS	0.958 471				
417	HUNTINGTON PARK	CAL	0.957 24				
418	LAKEMOOD	OHIO	0.956 342				
419	TORRINGTON	CONN	0.955 63				

CITIES RANKED BY 1960 MORTALITY RATIO-NON CARDIOVASCULAR RENAL DISEASES

(31)

RANK	CITY	1960			STATE	RANK	CITY	1960			STATE	RANK	CITY	1960		
		MORT.	RAT.	PAGE				MORT.	RAT.	PAGE				MORT.	RAT.	PAGE
1	BUTTE		1.668	249	MONT	60	BILOXI		1.167	232	MISS	60	BILOXI		1.167	232
2	BOISE		1.648	91	ID	61	SALEM		1.166	230	MASS	61	SALEM		1.166	230
3	CHARLESTON		1.532	402	SC	62	TERRE HAUTE		1.166	137	IND	62	TERRE HAUTE		1.166	137
4	BAKERSFIELD		1.495	17	CAL	63	MUNCIE		1.163	133	IND	63	MUNCIE		1.163	133
5	WILKES-BARRE		1.417	392	PENN	64	CLEVELAND		1.162	333	OHIO	64	CLEVELAND		1.162	333
6	JOHNSTOWN		1.371	379	PENN	65	JOPLIN		1.162	242	MO	65	JOPLIN		1.162	242
7	CHATTANOOGA		1.361	408	TENN	66	ROSWELL		1.159	286	NM	66	ROSWELL		1.159	286
8	ANNISTON		1.345	1	ALA	67	LIMA		1.158	343	OH	67	LIMA		1.158	343
9	NEWPORT		1.343	160	NEV	68	ONEHOBORO		1.157	161	KY	68	ONEHOBORO		1.157	161
10	RENO		1.342	23	NEV	69	BALTIMORE		1.157	173	MD	69	BALTIMORE		1.157	173
11	BROWNVILLE		1.338	418	TEX	70	EASTON		1.156	375	PENN	70	EASTON		1.156	375
12	COVINGTON		1.335	157	KY	71	DENVER		1.154	51	COLO	71	DENVER		1.154	51
13	MCKEESPORT		1.319	332	PENN	72	MIAMI		1.154	473	FLA	72	MIAMI		1.154	473
14	HAGERSTOWN		1.317	175	MD	73	SALEMSBURG		1.154	40	PA	73	SALEMSBURG		1.154	40
15	ALBUQUERQUE		1.316	285	NM	74	WILMINGTON		1.152	238	DE	74	WILMINGTON		1.152	238
16	FAYETTEVILLE		1.314	319	NC	75	MERIDIAN		1.150	237	MISS	75	MERIDIAN		1.150	237
17	WILMINGTON		1.303	324	NC	76	HATTIESBURG		1.150	234	MISS	76	HATTIESBURG		1.150	234
18	GREENVILLE		1.291	233	MISS	77	DANVILLE		1.149	101	ILL	77	DANVILLE		1.149	101
19	PANAMA CITY		1.290	76	FLA	78	TRENTON		1.147	281	NJ	78	TRENTON		1.147	281
20	NEWBURGH		1.288	301	NY	79	NEW ORLEANS		1.147	168	LA	79	NEW ORLEANS		1.147	168
21	HARRISBURG		1.287	377	PENN	80	LOUISVILLE		1.146	159	KY	80	LOUISVILLE		1.146	159
22	LAREDO		1.282	425	TEX	81	ERIE		1.145	376	PENN	81	ERIE		1.145	376
23	POCATELLO		1.282	92	ID	82	LAUREL		1.145	236	MISS	82	LAUREL		1.145	236
24	MACON		1.270	88	GA	83	KANSAS CITY		1.145	152	KAN	83	KANSAS CITY		1.145	152
25	CHESTER		1.262	374	PENN	84	SUPERIOR		1.145	476	WIS	84	SUPERIOR		1.145	476
26	EL PASO		1.255	421	TEX	85	ROME		1.144	89	GA	85	ROME		1.144	89
27	WASHINGTON		1.249	391	PENN	86	HARTFORD		1.143	355	CONN	86	HARTFORD		1.143	355
28	JERSEY CITY		1.249	269	NJ	87	TULSA		1.143	366	OKLA	87	TULSA		1.143	366
29	PITTSBURGH		1.245	387	PENN	88	MANSFIELD		1.142	345	OHIO	88	MANSFIELD		1.142	345
30	BOSTON		1.237	177	MASS	89	KEY WEST		1.140	71	FLA	89	KEY WEST		1.140	71
31	SACRAMENTO		1.237	37	CAL	90	BUFFALO		1.139	292	NY	90	BUFFALO		1.139	292
32	HAZELTON		1.235	378	PENN	91	STOCKTON		1.138	119	CAL	91	STOCKTON		1.138	119
33	CHELSEA		1.234	180	MASS	92	ANDERSON		1.138	119	IND	92	ANDERSON		1.138	119
34	SANTA FE		1.233	287	NM	93	ST. LOUIS		1.137	245	MO	93	ST. LOUIS		1.137	245
35	SCRANTON		1.232	399	PENN	94	YORK		1.137	395	PENN	94	YORK		1.137	395
36	JACKSONVILLE		1.232	70	FLA	95	LEBANON		1.136	381	PENN	95	LEBANON		1.136	381
37	LACKAWANNA		1.231	298	NY	96	VANCOUVER		1.134	454	WASH	96	VANCOUVER		1.134	454
38	GAINESVILLE		1.229	69	FLA	97	SHARON		1.133	390	PENN	97	SHARON		1.133	390
39	KNOXVILLE		1.227	411	TENN	98	ALEXANDRIA		1.133	163	LA	98	ALEXANDRIA		1.133	163
40	AUGUSTA		1.222	85	GA	99	WYANDOTTE		1.128	225	MICH	99	WYANDOTTE		1.128	225
41	SPRINGFIELD		1.222	9	MA	100	WILLIAMSPORT		1.128	394	PENN	100	WILLIAMSPORT		1.128	394
42	GREENVILLE		1.212	441	SC	101	MUSKOGEE		1.126	363	OKLA	101	MUSKOGEE		1.126	363
43	SANDUSKY		1.212	353	MI	102	JACKSON		1.126	216	MICH	102	JACKSON		1.126	216
44	HOBOKEN		1.211	267	NJ	103	SAN ANTONIO		1.123	424	TEX	103	SAN ANTONIO		1.123	424
45	LAFAYETTE		1.210	165	LA	104	ARCADE		1.123	82	ILL	104	ARCADE		1.123	82
46	NEWARK		1.209	273	NJ	105	VALLEY STREAM		1.120	49	NY	105	VALLEY STREAM		1.120	49
47	OKLAHOMA CITY		1.197	365	OKLA	106	ALBUQUERQUE		1.120	312	NM	106	ALBUQUERQUE		1.120	312
48	TAMPA		1.196	80	FLA	107	ROCHESTER		1.120	228	NY	107	ROCHESTER		1.120	228
49	GREAT FALLS		1.190	250	MONT	108	ALBANY		1.120	258	NY	108	ALBANY		1.120	258
50	LYNN		1.189	190	MASS	109	PROVIDENCE		1.119	399	RI	109	PROVIDENCE		1.119	399
51	HAWTRAMCK		1.187	214	MICH	110	NASHVILLE		1.119	413	TENN	110	NASHVILLE		1.119	413
52	UNION CITY		1.186	282	NJ	111	FITCHBURG		1.117	184	MASS	111	FITCHBURG		1.117	184
53	TROY		1.184	310	NY	112	SAN PERNARDINO		1.116	38	CAL	112	SAN PERNARDINO		1.116	38
54	TUCSON		1.184	9	ARIZ	113	FRESNO		1.112	22	CAL	113	FRESNO		1.112	22
55	LANCASTER		1.179	380	PENN	114	LEXINGTON		1.111	158	KY	114	LEXINGTON		1.111	158
56	BAY CITY		1.177	208	MICH	115	RAPID CITY		1.111	406	SD	115	RAPID CITY		1.111	406
57	PETERSBURG		1.174	444	VA	116	LAWRENCE		1.110	188	MASS	116	LAWRENCE		1.110	188
58	COLORADO SPRINGS		1.168	50	COLO	117	LINCOLN PARK		1.107	219	MICH	117	LINCOLN PARK		1.107	219
59	LOWELL		1.167	189	MASS	118	SPRINGFIELD		1.106	117	ILL	118	SPRINGFIELD		1.106	117
						119	ALTOONA		1.105	372	PENN	119	ALTOONA		1.105	372

RANK	CITY	STATE	1960		RANK	CITY	STATE	1960	
			MORT.	RAT.				MORT.	RAT.
120	PATTERSON	NJ	1.105	278	180	KANSAS CITY	MO	1.068	243
121	CINCINNATI	OHIO	1.104	332	181	CAMDEN	NJ	1.068	261
122	NASHUA	NH	1.104	256	182	BETHLEHEM	PENN	1.067	373
123	WHITE PLAINS	NY	1.104	314	183	OGDEN	UTAH	1.067	434
124	NEW BRUNSWICK	NJ	1.104	274	184	PENSACOLA	FLA	1.066	77
125	SALT LAKE CITY	UTAH	1.102	436	185	CHEYENNE	WY	1.065	480
126	PORTLAND	ME	1.101	172	186	ASHEVILLE	NC	1.065	316
127	EAST CHICAGO	IND	1.100	121	187	SPRINGFIELD	MASS	1.064	202
128	BESSEMER	ALA	1.100	2	188	YOUNGSTOWN	OHIO	1.062	359
129	KANKAKEE	ILL	1.099	109	189	BILLINGS	MONT	1.062	248
130	ASHLAND	KY	1.099	156	190	WICHITA	KAN	1.061	155
131	EAST ST. LOUIS	ILL	1.099	103	191	NEWARK	OHIO	1.060	349
132	BATTLE CREEK	MICH	1.099	207	192	DULUTH	MINN	1.060	226
133	DANVILLE	VA	1.099	440	193	SPRINGFIELD	OHIO	1.060	355
134	CHARLESTON	WV	1.099	456	194	TALLAHASSEE	FLA	1.059	79
135	BROCKTON	MASS	1.098	178	195	SOMERVILLE	MASS	1.058	201
136	WATERTOWN	NY	1.098	313	196	ST. PAUL	MINN	1.058	230
137	PERTH AMBOY	NJ	1.098	279	197	GREEN BAY	WIS	1.058	467
138	ALBUQUERQUE	PENN	1.097	370	198	NEWPORT NEWS	VA	1.058	442
139	INDIANAPOLIS	IND	1.097	127	199	LUBBOCK	TEX	1.057	426
140	BAYONNE	NJ	1.096	258	200	LEWISTON	ME	1.057	171
141	STEBENVILLE	OHIO	1.095	356	201	ELMIRA	NY	1.056	293
142	SPARTANBURG	SC	1.092	405	202	GAUSDEN	ALA	1.055	4
143	DURBUQUE	IOWA	1.092	144	203	FALL RIVER	MASS	1.055	183
144	BRIDGEPORT	CONN	1.089	53	204	ALBANY	GA	1.055	82
145	RICHMOND	VA	1.089	446	205	COLUMBUS	GA	1.054	86
146	WHEELING	WV	1.087	462	206	COLUMBUS	IND	1.054	129
147	NEW YORK CITY	NY	1.087	303	207	QUINCY	ILL	1.053	114
148	WINSTON-SALEM	NC	1.086	325	208	CLINTON	IOWA	1.053	140
149	WAKARUSA	WASH	1.086	455	209	PORT HURON	MICH	1.053	222
150	WATERBURY	CONN	1.085	64	210	CANTON	OHIO	1.052	331
151	PELHAM	ALAB	1.084	112	211	BELOIT	WIS	1.050	464
152	LITTLE ROCK	ARK	1.083	265	212	KEARNY	NJ	1.049	270
153	HACKENSACK	NJ	1.083	265	213	DETROIT	MICH	1.049	210
154	NICHOLS	OK	1.082	304	214	NEW BEDFORD	MASS	1.049	194
155	NICHOLS	OK	1.082	304	215	CHICAGO	ILL	1.048	177
156	BURLINGTON	VT	1.081	437	216	WARREN	OHIO	1.048	358
157	DISTRICT OF COLUMBIA	MICH	1.080	213	217	WARREN	OHIO	1.048	358
158	SHREVEPORT	LA	1.079	66	218	CLARKSBURG	WV	1.047	457
159	FORT DODGE	IOWA	1.078	169	219	CLARKSBURG	WV	1.044	457
160	ATHENS	GA	1.078	145	220	BREMERTON	WASH	1.042	449
161	NEW CASTLE	PENN	1.077	83	221	RIVERSIDE	CAL	1.042	36
162	ELIZABETH	NJ	1.077	383	222	STOUX CITY	IOWA	1.040	149
163	PITTSFIELD	MASS	1.077	197	223	AMSTERDAM	NY	1.040	289
164	PHILADELPHIA	PENN	1.076	386	224	CUMBERLAND	MD	1.039	174
165	RECMWOOD CITY	CAL	1.076	34	225	LAKE CHARLES	LA	1.038	166
166	CHARLOTTESVILLE	VA	1.075	439	226	GARY	IND	1.038	125
167	READING	PENN	1.074	388	227	NORFOLK	VA	1.038	443
168	OMAHA	NEB	1.073	252	228	MEMPHIS	TENN	1.036	412
169	ZANESVILLE	OHIO	1.073	360	229	FERNDALE	MICH	1.036	211
170	DEARBORN	MICH	1.073	209	230	AKRON	OHIO	1.036	328
171	ORANGE	NJ	1.072	276	231	COLUMBUS	OHIO	1.034	335
172	TACOMA	WASH	1.072	453	232	WEST NEW YORK	NJ	1.033	283
173	PORTLAND	ORE	1.071	368	233	CORPUS CHRISTI	TEX	1.033	419
174	MONTGOMERY	ALA	1.071	6	234	DAYTON	OHIO	1.033	357
175	GALVESTON	TEX	1.070	423	235	JOLIET	ILL	1.033	337
176	SEATTLE	WASH	1.070	451	236	LORAIN	OHIO	1.032	108
177	GRANOK	VA	1.070	447	237	PASSAIC	NJ	1.032	277
178	MORGANTOWN	WV	1.069	460	238	FORT LAUDERDALE	FLA	1.031	68
179	HOLYOKE	MASS	1.068	187	239				

RANK	CITY	STATE	1960		PAGE	(1960 MORTALITY RATIO-CONT.)		RANK	CITY	STATE	1960		PAGE
			MORT.	RAT.		(83)	MORT.				RAT.		
240	MANCHESTER	NH	1.029	255	255			300	EVERETT	MASS	0.988	182	
241	MILWAUKEE	WIS	1.029	472	472			301	WATERLOO	IOWA	0.987	150	
242	ATLANTIC CITY	NJ	1.028	257	257			302	DALLAS	TEX	0.985	420	
243	OTTUMWA	IOWA	1.028	148	148			303	WAGONSCKET	RI	0.985	401	
244	SAN JOSE	CAL	1.028	41	41			304	OSKOSH	WIS	0.983	473	
245	PAUCAR	KY	1.029	162	162			305	FOND DU LAC	WIS	0.983	466	
246	DES MOINES	IOWA	1.027	153	153			306	ALLIANCE	OHIO	0.982	329	
247	MUSKOGEE	MICH	1.027	250	250			307	NEW BRITAIN	CONN	0.982	58	
248	BELLEVILLE	ILL	1.026	195	195			308	SHEBOYGAN	WIS	0.981	475	
249	MALDEN	MASS	1.026	191	191			309	PORTSMOUTH	OHIO	0.981	352	
250	ROCKY MOUNT	NC	1.025	323	323			310	WACO	TEX	0.980	432	
251	BINGHAMTON	NY	1.024	291	291			311	FORT WAYNE	IND	0.980	124	
252	NORRISTOWN	PENN	1.023	385	385			312	BELL INGHAM	WASH	0.979	448	
253	BIRMINGHAM	ALA	1.023	3	3			313	JOHNSON CITY	TENN.	0.978	410	
254	STAMFORD	CONN	1.023	62	62			314	REVERE	MASS	0.978	199	
255	SAVANNAH	GA	1.022	90	90			315	LOS ANGELES	CAL	0.978	27	
256	ORLANDO	FLA	1.022	75	75			316	OAKLAND	CAL	0.977	29	
257	REDONDO BEACH	CAL	1.021	33	33			317	MERIDEN	CONN	0.977	56	
258	WAUKEGAN	ILL	1.021	118	118			318	WEST PALM BEACH	FLA	0.976	81	
259	HUNTINGTON PARK	CAL	1.020	24	24			319	FLINT	MICH	0.975	212	
260	HUNTINGTON	WV	1.020	459	459			320	ELKHART	IND	0.974	122	
261	FORT WORTH	TEX	1.018	422	422			321	HIGHLAND PARK	MICH	0.974	215	
262	MASSILLON	OHIO	1.017	347	347			322	LANTON	OKLA	0.974	362	
263	ST. JOSEPH	MO	1.017	244	244			323	PANTUCKET	RI	0.972	398	
264	HAMILTON	OHIO	1.016	341	341			324	TORRINGTON	CONN	0.971	63	
265	ROCKFORD	ILL	1.016	115	115			325	SANTA ANA	CAL	0.970	44	
266	MISHAWAKA	IND	1.015	132	132			326	EAST ORANGE	NJ	0.969	263	
267	MINNEAPOLIS	MINN	1.015	227	227			327	DECATUR	ILL	0.968	102	
268	KINGSTON	NY	1.015	297	297			328	GRANITE CITY	ILL	0.968	107	
269	COLUMBIA	SC	1.013	403	403			329	PUEBLO	COLO	0.967	52	
270	COUNCIL BLUFFS	IOWA	1.013	141	141			330	SIOUX FALLS	SD	0.967	407	
271	NEW HAVEN	CONN	1.013	159	159			331	WICHITA	KANS	0.964	441	
272	HUTCHINSON	KAN	1.012	131	131			332	EUCLEID	OHIO	0.964	340	
273	HAVERTHILL	MASS	1.011	186	186			333	MARION	IND	0.963	130	
274	GRAND FORKS	ND	1.010	327	327			334	PHOENIX	ARIZ	0.963	8	
275	SCHENECTADY	NY	1.010	308	308			335	MIDDLETON	OHIO	0.962	348	
276	INDEPENDENCE	MO	1.006	240	240			336	NORTH LITTLE ROCK	ARK	0.961	13	
277	JACKSON	MISS	1.005	235	235			337	FAIRMONT	WV	0.960	458	
278	RICHMOND	CAL	1.005	35	35			338	AUBURN	NY	0.960	290	
279	KOKOMO	IND	1.004	128	128			339	EVERETT	WASH	0.959	450	
280	LA GRANGE	GA	1.003	87	87			340	WINONA	MINN	0.959	231	
281	SAN ANGELO	TEX	1.003	428	428			341	NORWOOD	OHIO	0.958	350	
282	SPOKANE	WASH	1.003	452	452			342	IRVINGTON	NJ	0.958	268	
283	LOCKPORT	NY	1.003	299	299			343	NEW ROCHELLE	NY	0.957	302	
284	SYRACUSE	NY	1.002	309	309			344	AMARILLO	TEX	0.955	415	
285	SAGINAW	MICH	1.002	224	224			345	ROCHESTER	NY	0.955	306	
286	QUINCY	MASS	1.001	198	198			346	BRISTOL	CONN	0.955	54	
287	WALTHAM	MASS	1.000	204	204			347	PLAINFIELD	NJ	0.954	280	
288	WORCESTER	MASS	0.999	205	205			348	CHARLOTTE	NC	0.952	317	
289	ALLENSTOWN	PENN	0.999	371	371			349	DURHAM	NC	0.952	318	
290	SANTA BARBARA	CAL	0.998	45	45			350	BLOOMINGTON	ILL	0.952	97	
291	HAMMOND	IND	0.998	126	126			351	DAVENPORT	IOWA	0.951	142	
292	INGLEWOOD	CAL	0.997	25	25			352	PORT ARTHUR	TEX	0.951	427	
293	EAST CLEVELAND	OHIO	0.997	338	338			353	ALTON	ILL	0.950	93	
294	GREENSBORO	NC	0.997	320	320			354	NEW LONDON	CONN	0.950	60	
295	KENOSHA	WIS	0.996	468	468			355	LONG BEACH	CAL	0.948	26	
296	MICHIGAN CITY	IND	0.996	131	131			356	TYLER	TEX	0.948	431	
297	SOUTH BEND	IND	0.995	136	136			357	ENID	OKLA	0.948	361	
298	LANSING	MICH	0.992	218	218			358	HOUSTON	TEX	0.948	424	
299	PORTSMOUTH	VA	0.990	445	445			359	BLOOMINGTON	IND	0.947	120	

1960 MORTALITY RATIO-CONT. (34)				1960 MORT. RAT. PAGE			
RANK	CITY	STATE	1960 MORT. RAT. PAGE	RANK	CITY	STATE	1960 MORT. RAT. PAGE
360	PONTIAC	MICH	0.944 221	420	COMPTON	CAL	0.890 21
361	BATON ROUGE	LA	0.944 164	421	SEVERLY HILLS	CAL	0.889 19
362	WADSWORTH	WIS	0.944 478	422	UTICA	NY	0.889 311
363	YONKERS	NY	0.943 315	423	EAU CLAIRE	WIS	0.887 465
364	ROCK ISLAND	ILL	0.942 116	424	APPLETON	WIS	0.885 463
365	SAN LEANDRO	CAL	0.940 42	425	TOPEKA	KAN	0.885 154
366	SAN DIEGO	CAL	0.940 39	426	BURLINGTON	IOWA	0.885 138
367	CEDAR RAPIDS	IND	0.940 139	427	BANGOR	ME	0.885 170
368	NEW ALBANY	IND	0.940 134	428	CLEVELAND HEIGHTS	OHIO	0.885 334
369	MACINE	WIS	0.940 474	429	SEAFORD	ILL	0.881 96
370	LINDEN	NJ	0.940 271	430	ATLANTA	GA	0.880 414
371	PARKERSBURG	WV	0.940 461	431	BRIDGEPORT	MASS	0.880 203
372	RICHMOND	IND	0.939 135	432	BURBANK	CAL	0.876 20
373	LAKELAND	FLA	0.938 72	433	LINCOLN	CAL	0.875 28
374	ALAMEDA	CAL	0.938 15	434	MUNDIA	MASS	0.871 239
375	BEVERLY	MASS	0.934 176	435	CUTOPEE	MASS	0.870 181
376	LAKESIDE	OHIO	0.934 300	436	DAK PARK	ILL	0.869 112
377	MOUNT VERNON	NY	0.933 269	437	MANITOWOC	WIS	0.868 471
378	LA CROSSE	WIS	0.930 407	438	ELVIRA	OHIO	0.868 333
379	JACKSON BEACH	TENN	0.929 100	439	MELROSE	MASS	0.867 113
380	CICERO	ILL	0.929 111	440	PINE BLUFF	ARK	0.865 329
381	WEST	ILL	0.929 111	441	EUGENE	ORE	0.865 490
382	WEST ELLIS	WIS	0.928 479	442	TEMPLE	TEX	0.864 198
383	MARTIN	OHIO	0.927 346	443	CHAMPAIGN	ILL	0.864 146
384	KALAMAZOO	MICH	0.927 217	444	IOWA CITY	IOWA	0.864 241
385	MADISON	IND	0.925 247	445	JEFFERSON CITY	MO	0.864 247
386	UNIVERSITY CITY	MO	0.925 123	446	SOUTH GATE	CAL	0.863 47
387	EVANSVILLE	IND	0.924 147	447	ITHACA	NY	0.861 295
388	MASON CITY	IOHA	0.924 393	448	SHAKER HEIGHTS	OHIO	0.858 354
389	WILKINSBURG	PENNA	0.923 417	449	PALD ALTO	OHIO	0.856 30
390	BEAUMONT	TEX	0.922 265	450	TUSCALOOSA	ALA	0.856 7
391	GARFIELD	NJ	0.921 597	451	FORT SMITH	ARK	0.855 10
392	NEWPORT	RI	0.919 397	452	POMONA	CAL	0.851 32
393	SALEM	ORE	0.917 369	453	WICHITA FALLS	TEX	0.849 433
394	MADISON	WIS	0.915 470	454	ALHAMBRA	CAL	0.847 16
395	CUYAHOGA FALLS	OHIO	0.915 336	455	PARMA	OHIO	0.837 351
396	NORWALK	CONN	0.914 61	456	EVANSTON	ILL	0.836 105
397	MEDFORD	MASS	0.914 192	457	PASADENA	CAL	0.831 31
398	LINCOLN	NEB	0.914 251	458	ROME	NY	0.831 307
399	NEWTOWN	MASS	0.911 195	459	ST. PETERSBURG	FLA	0.828 78
400	BLOOMFIELD	NJ	0.911 260	460	NORTHAMPTON	MASS	0.822 196
401	MOBILE	ALA	0.910 5	461	ROYAL OAK	MICH	0.822 223
402	HIGH POINT	NC	0.910 321	462	GALESBURG	ILL	0.818 106
403	JAMESTOWN	NY	0.909 296	463	PROVO	UTAH	0.815 435
404	NUTLEY	NJ	0.909 275	464	ANN ARBOR	MICH	0.812 206
405	SANTA MONICA	CAL	0.907 46	465	GLENDALE	CAL	0.811 23
406	HAUSAU	WIS	0.907 477	466	MAYWOOD	ILL	0.809 110
407	FARGO	ND	0.905 326	467	ELGIN	ILL	0.808 104
408	SALINA	KAN	0.905 153	468	BERKELEY	CAL	0.785 18
409	SAN MATEO	CAL	0.903 43	469	CONCORD	NH	0.784 254
410	GLUCESTER	MASS	0.903 185	470	CRANSTON	RI	0.778 396
411	SPRINGFIELD	MO	0.903 246	471	MIAMI BEACH	FLA	0.759 74
412	WARWICK	RI	0.903 400	472	NORMAN	OKLA	0.751 364
413	ST. CLOUD	MINN	0.902 229	473	MIDDLETOWN	CONN	0.670 57
414	NEW KENSINGTON	PENNA	0.900 384				
415	BELLEVILLE	NJ	0.899 259				
416	AUSTIN	TEX	0.894 416				
417	RALEIGH	NC	0.893 322				
418	CLIFTON	NJ	0.892 262				
419	MONTCLAIR	NJ	0.890 272				

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RANK	CITY	STATE	1970 MORT. RAT.	PAGE	RANK	CITY	STATE	1970 MORT. RAT.	PAGE
1	BESSEMER	ALA	1.720	2	60	ST. LOUIS	MO	1.230	245
2	BUTTE	MONT	1.651	249	61	DARVILLE	ILL	1.230	101
3	ALBUQUERQUE	NM	1.469	285	62	BROWNSVILLE	TEX	1.227	418
4	PANAMA CITY	FLA	1.455	76	63	PETERSBURG	VA	1.226	444
5	BIRMINGHAM	ALA	1.446	3	64	BAKERSFIELD	CAL	1.226	17
6	KEY WEST	FLA	1.435	71	65	HUNTINGTON PARK	CAL	1.225	24
7	AUGUSTA	GA	1.434	85	66	ASHEVILLE	NC	1.224	316
8	JOHNSTOWN	PENN	1.430	379	67	BAY CITY	MICH	1.218	208
9	NEWBURGH	NY	1.424	301	68	ALTONA	PENN	1.214	372
10	CHARLESTON	SC	1.414	402	69	MONTGOMERY	ALA	1.214	6
11	WICKSBURG	MISS	1.395	238	70	KOKOMO	IND	1.214	128
12	NORRISTOWN	PENN	1.367	385	71	GALVESTON	TEX	1.214	423
13	FAYETTEVILLE	NC	1.363	319	72	DISTRICT OF COLUMBIA	CAL	1.210	66
14	WILMINGTON	NC	1.355	324	73	JACKSON BEACH	CAL	1.209	37
15	COVINGTON	LA	1.352	257	74	ST. LOUIS BEACH	ARK	1.208	11
16	WATERBURY	CT	1.339	255	75	HG SPRINGS	WASH	1.205	455
17	WILMINGTON	PENN	1.339	291	76	YAKIMA	WASH	1.202	455
18	CHICAGO	ILL	1.331	283	77	CLEVELAND	OHIO	1.202	333
19	TAMPA	FLA	1.330	80	78	PORT HURON	MICH	1.201	222
20	SANDUSKY	OHIO	1.326	353	79	CHELSEA	MASS	1.197	180
21	SPARTANBURG	SC	1.322	405	80	NEW ORLEANS	LA	1.195	168
22	LAUREL	MISS	1.316	236	81	HARTFORD	CONN	1.192	55
23	BOSTON	MASS	1.312	177	82	CINCINNATI	OHIO	1.192	332
24	WHEELING	WV	1.307	462	83	SAN LEANDRO	CAL	1.191	42
25	CHATTANOOGA	TENN	1.298	408	84	BUFFALO	NY	1.189	292
26	EAST ST. LOUIS	ILL	1.293	103	85	STEUERENVILLE	OHIO	1.186	356
27	SAVANNAH	GA	1.291	90	86	PENSACOLA	FLA	1.185	77
28	ANNISTON	ALA	1.289	447	87	MCKEESPORT	PENN	1.184	382
29	ROANOKE	VA	1.289	242	88	CAMDEN	NJ	1.180	261
30	JOPLIN	MO	1.289	286	89	MANSFIELD	OHIO	1.180	345
31	ROCHESTER	NM	1.288	9	90	SAN BERNARDINO	CAL	1.180	38
32	TUCSON	ARIZ	1.287	13	91	ST. JOSEPH	MO	1.179	244
33	NORTH LITTLE ROCK	ARK	1.284	456	92	ZANESVILLE	OHIO	1.176	360
34	CHARLESTON	WV	1.284	386	93	BOISE	ID	1.175	91
35	PHILADELPHIA	PENN	1.284	73	94	ALEXANDRIA	LA	1.174	163
36	MIAMI	FLA	1.280	73	95	HAGERSTOWN	MD	1.173	175
37	GREENVILLE	MISS	1.277	233	96	JERSEY CITY	NJ	1.172	269
38	WILKES-BARRE	PENN	1.275	392	97	SALT LAKE CITY	UTAH	1.172	436
39	HARRISBURG	PENN	1.270	377	98	EL PASO	TEX	1.171	421
40	LAKELAND	FLA	1.267	72	99	NEWARK	NJ	1.169	273
41	MUNCIE	IND	1.267	133	100	LACKAWANNA	NY	1.167	298
42	ROME	GA	1.266	89	101	SALEM	ORE	1.166	369
43	YORK	PENN	1.266	395	102	GREAT FALLS	MONT	1.165	250
44	MERIDIAN	MISS	1.263	237	103	PARKERSBURG	WV	1.165	461
45	SANTA FE	NM	1.259	287	104	HOBOKEN	NJ	1.164	267
46	SAULT STE MARIE	PENN	1.256	245	105	HUNTINGTON	WV	1.162	447
47	OKLAHOMA CITY	OK	1.256	253	106	EAST CHICAGO	IND	1.162	121
48	RENO	NEV	1.249	253	107	DAYTON	OHIO	1.160	337
49	NEWPORT	KY	1.246	160	108	KNOXVILLE	TENN	1.158	411
50	ALBANY	NY	1.245	288	109	LANCASTER	PENN	1.157	380
51	BATTLE CREEK	MICH	1.240	207	110	QUINCY	ILL	1.157	114
52	BALTIMORE	MD	1.238	173	111	MACON	GA	1.157	88
53	LOCKPORT	NY	1.238	299	112	SAN FRANCISCO	CAL	1.157	40
54	LIMA	OHIO	1.236	343	113	JACKSONVILLE	FLA	1.156	70
55	GREENVILLE	SC	1.236	404	114	VALLEJO	CAL	1.155	49
56	PORTSMOUTH	OHIO	1.235	352	115	KINGSTON	NY	1.154	297
57	SCOTSMOUTH	MASS	1.235	201	116	COLUMBIA	SC	1.153	403
58	JACKSON	MISS	1.232	235	117	NEW BRUNSWICK	NJ	1.152	274
59	LOUISVILLE	KY	1.231	159	118	HIGHLAND PARK	MICH	1.150	215
					119	STOCKTON	CAL	1.150	48

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			MORT.	RAT.		(86)	MORT.				RAT.		
120	JACKSON	MICH	1.148	216				180	HATTIESBURG	MISS	1.106	234	
121	CHESTER	PENN	1.147	374				181	CORPUS CHRISTI	TEX	1.105	419	
122	ELVIA	OHIO	1.146	339				182	NEW YORK CITY	NY	1.103	303	
123	PONTIAC	MICH	1.145	221				183	FORT LAUDERDALE	FLA	1.102	68	
124	MADSEN	MASS	1.144	191				184	LAWRENCE	MASS	1.101	188	
125	PUEBLO	COLO	1.144	52				185	NEW KENSINGTON	PENN	1.100	384	
126	RICHMOND	VA	1.143	446				186	BELLEVILLE	ILL	1.100	95	
127	PITTSBURGH	PENN	1.141	387				187	REDONDO BEACH	CAL	1.100	33	
128	TROY	NY	1.141	310				188	GADSDEN	ALA	1.099	4	
129	FORT WORTH	TEX	1.140	422				189	WCONSOCKET	RI	1.099	401	
130	REDWOOD CITY	CAL	1.140	34				190	EVERETT	WASH	1.098	450	
131	PHOENIX	ARIZ	1.140	8				191	MUSKOGEE	MICH	1.097	220	
132	ORLANDO	FLA	1.138	75				192	ORANGE	NJ	1.096	276	
133	BILLINGS	MONT	1.138	248				193	READING	PENN	1.093	388	
134	VANCOUVER	WASH	1.137	454				194	SPRINGFIELD	ILL	1.093	117	
135	OGDEN	UTAH	1.137	434				195	WACO	TEX	1.092	432	
136	SHARON	PENN	1.136	390				196	MUSKOGEE	OKLA	1.091	363	
137	LORAIN	OHIO	1.136	344				197	QUINCY	MASS	1.091	198	
138	DAYTONA BEACH	FLA	1.136	67				198	MASON CITY	IOWA	1.091	147	
139	CHEYENNE	WY	1.134	480				199	NEW ALBANY	IND	1.090	134	
140	CANTON	OHIO	1.133	331				200	CMPTON	CAL	1.090	21	
141	DETROIT	MICH	1.132	210				201	CHARLOTTE	NC	1.090	317	
142	SCRANTON	PENN	1.132	389				202	HAMILTON	OHIO	1.089	341	
143	SPRINGFIELD	OHIO	1.132	355				203	HACKENSACK	NJ	1.089	286	
144	YOUNGSTOWN	OHIO	1.132	359				204	BATON ROUGE	LA	1.088	184	
145	GAINSVILLE	FLA	1.132	69				205	LA GRANGE	GA	1.086	87	
146	PORTLAND	ME	1.131	172				206	GRAND RAPIDS	MICH	1.086	213	
147	PROVIDENCE	RI	1.131	599				207	SAN ANTONIO	TEX	1.086	429	
148	LEXINGTON	KY	1.130	158				208	SEATTLE	WASH	1.084	451	
149	COLORADO SPRINGS	COLO	1.129	50				209	DAYVILLE	VA	1.081	440	
150	KENTON	NJ	1.129	281				210	FORT SMITH	ARK	1.081	10	
151	TULOMA	WY	1.127	226				211	PRERERTON	WASH	1.080	449	
152	YACOMA	WASH	1.127	425				212	COLUMBUS	OHIO	1.080	335	
153	PORTELANO	ORE	1.126	368				213	AKRON	OHIO	1.080	328	
154	TERRE HAUTE	IND	1.126	137				214	BINGHAMTON	NY	1.079	261	
155	LAPEDE	TEX	1.123	425				215	PAIDUAH	KY	1.079	192	
156	LOWELL	MASS	1.121	189				216	LITTLE ROCK	ARK	1.077	12	
157	CHARLOTTESVILLE	VA	1.121	439				217	PERTH AMBOY	NJ	1.077	279	
158	HOLYOKE	MASS	1.119	187				218	PORT ARTHUR	TEX	1.077	427	
159	NEWARK	OHIO	1.119	349				219	PORTSMOUTH	VA	1.076	445	
160	HAZELTON	PENN	1.117	378				220	SYRACUSE	NY	1.076	309	
161	WATERLOO	NY	1.117	313				221	WYANDOTTE	MICH	1.075	225	
162	ELKHART	IND	1.117	122				222	WARREN	OHIO	1.075	358	
163	NORWOOD	OHIO	1.115	350				223	HUXTON	TEX	1.075	424	
164	DENVER	COLO	1.114	51				224	TOLEDO	OHIO	1.074	357	
165	FAIRMONT	WV	1.114	458				225	SAN JOSE	CAL	1.074	41	
166	SPOKANE	WASH	1.114	452				226	PITTSFIELD	MASS	1.073	197	
167	CLINTON	IOWA	1.113	14C				227	LAFAYETTE	IND	1.073	129	
168	ERIE	PENN	1.111	376				228	COUNCIL BLUFFS	IOWA	1.073	141	
169	BARBERTON	OHIO	1.111	330				229	ROCHESTER	NY	1.073	306	
170	SCHEMECTADY	NJ	1.111	208				230	ALBUQUERQUE	PENN	1.073	37C	
171	ATLANTIC CITY	OKLA	1.110	257				231	LYNCHBURG	VA	1.072	441	
172	OKLAHOMA CITY	MASS	1.109	365				232	SALEM	MASS	1.071	200	
173	SPRINGFIELD	MD	1.109	202				233	CHICAGO	ILL	1.071	99	
174	CUMBERLAND	IND	1.109	174				234	WILLIAMSPORT	PENN	1.069	394	
175	GARY	IND	1.109	125				235	DALLAS	TEX	1.068	420	
176	PICHMOND	IND	1.108	135				236	ANDERSON	IND	1.068	119	
177	PINE BLUFF	ARK	1.108	14				237	CLARKSBURG	WV	1.066	457	
178	HARTFORD	MICH	1.107	214				238	TALLAHASSEE	FLA	1.065	79	
179	NEW CASTLE	PENN	1.106	383				239	FRESNO	CAL	1.063	22	

RANK	CITY	STATE	1970		PAGE	(1970 MORTALITY RATIO-CONT.)	RANK	CITY	STATE	1970		PAGE
			MORT.	RAT.						MORT.	RAT.	
240	SOUTH BEND	IND	1-062	136	428	(87)	300	MONROE	LA	1-017	167	
241	SAN ANGELO	TEX	1-062	428			301	CICERO	ILL	1-016	100	
242	AURORA	ILL	1-061	94			302	BELLINGHAM	WASH	1-016	448	
243	KANSAS CITY	KAN	1-060	152			303	UNION CITY	NJ	1-014	282	
244	WHITE PLAINS	NY	1-059	314			304	BEAUMONT	TEX	1-014	417	
245	AMSTERDAM	NY	1-059	289			305	SUPERIOR	WIS	1-014	476	
246	DURHAM	NC	1-059	318			306	PANUCKET	RI	1-013	398	
247	WINSTON-SALEM	NC	1-059	225			307	COLUMBUS	GA	1-013	86	
248	FALL RIVER	MASS	1-056	183			308	ALTON	ILL	1-012	93	
249	OMENSBORO	KY	1-056	161			309	LEBANON	PENN	1-012	381	
250	WALTHAM	MASS	1-055	204			310	EUGENE	ORE	1-011	264	
251	ALLIANCE	OHIO	1-055	323			311	ELIZABETH	NJ	1-010	169	
252	ROCKY MOUNT	NC	1-053	323			312	SHREVEPORT	LA	1-010	209	
253	MOBILE	ALA	1-053	5			313	DEARBORN	MICH	1-009	212	
254	BROCKTON	MASS	1-052	178			314	FLINT	MICH	1-009	209	
255	BRIDGEPORT	CONN	1-051	53			315	FITCHBURG	MASS	1-008	184	
256	FORT WAYNE	IND	1-050	124			316	ROCKFORD	ILL	1-008	115	
257	LUBBOCK	TEX	1-050	426			317	BLOOMINGTON	ILL	1-003	97	
258	GREENSBORO	NC	1-050	320			318	BURBANK	CAL	1-001	20	
259	LINCOLN PARK	MICH	1-049	219			319	LINDEN	NJ	1-001	271	
260	PASSAIC	NJ	1-048	277			320	BELLEVILLE	NJ	1-000	259	
261	DES MOINES	IOWA	1-047	143			321	NEMPOT	RI	0-999	397	
262	GRAND FORKS	ND	1-044	327			322	LYNN	MASS	0-999	190	
263	BELOIT	WIS	1-043	464			323	LOS ANGELES	CAL	0-999	27	
264	MARTIN	OHIO	1-043	346			324	SPRINGFIELD	MO	0-998	246	
265	FERNDALE	MICH	1-043	211			325	NORTHAMPTON	MASS	0-998	196	
266	SAGINAW	MICH	1-041	224			326	LAKWOOD	OHIO	0-998	342	
267	SHEBOYGAN	WIS	1-040	475			327	RICHMOND	CAL	0-997	35	
268	AMARILLO	TEX	1-040	415			328	JOLIET	ILL	0-997	108	
269	MICHIGAN CITY	IND	1-040	131			329	MISHAWAKA	IND	0-996	132	
270	OTTUMWA	IOWA	1-040	148			330	OAKLAND	CAL	0-994	29	
271	EVANSVILLE	IND	1-038	123			331	BAYONNE	NJ	0-993	258	
272	MASSILLON	NEB	1-038	347			332	WAUKEGAN	ILL	0-992	118	
273	OMAHA	NEB	1-036	252			333	NASHVILLE	TENN	0-992	413	
274	PEORIA	ILL	1-036	113			334	NEWPORT NEWS	VA	0-991	442	
275	GRANITE CITY	ILL	1-036	107			335	LANTON	OKLA	0-989	362	
276	MINNEAPOLIS	MINN	1-035	227			336	PLAINFIELD	NJ	0-987	280	
277	BLOOMINGTON	IND	1-034	120			337	BEVERLY	MASS	0-987	176	
278	POCATELLO	ID	1-034	92			338	ROCHESTER	MINN	0-987	228	
279	BANGOR	ME	1-034	170			339	CEDAR RAPIDS	IOWA	0-985	139	
280	DUBUQUE	IOWA	1-031	144			340	ALAMEDA	CAL	0-985	15	
281	NEW LONDON	CONN	1-031	60			341	MEDFORD	MASS	0-982	192	
282	NIAGARA FALLS	NY	1-031	304			342	INDEPENDENCE	MO	0-982	242	
283	NASHUA	NH	1-031	256			343	DAVENPORT	IOWA	0-982	142	
284	BURLINGTON	VT	1-030	437			344	NEW BEDFORD	MASS	0-981	194	
285	NEW HAVEN	CONN	1-030	59			345	REVERE	MASS	0-981	199	
286	HIGH POINT	NC	1-028	321			346	ITHACA	NY	0-981	295	
287	KEARNY	NJ	1-027	270			347	TULSA	OKLA	0-979	366	
288	STOUC CITY	IOWA	1-027	149			348	MEMPHIS	TENN	0-979	412	
289	WICHITA	KAN	1-026	155			349	ASHLAND	KY	0-979	156	
290	WAUSAU	WIS	1-026	477			350	RIVERSIDE	CAL	0-979	36	
291	PATTERSON	NJ	1-023	278			351	MILWAUKEE	WIS	0-977	472	
292	NORFOLK	VA	1-022	443			352	KALAMAZOC	MICH	0-976	217	
293	BLOXI	MISS	1-021	232			353	MORGANTOWN	WV	0-975	460	
294	LANSING	MICH	1-021	218			354	ABILENE	TEX	0-975	414	
295	FUTCHINSON	KAN	1-020	151			355	IRVINGTON	NJ	0-974	268	
296	GLOUCESTER	MASS	1-018	185			356	HAMMOND	IND	0-968	126	
297	WORCESTER	MASS	1-018	205			357	ST. PAUL	MINN	0-968	230	
298	LAFAYETTE	LA	1-017	165			358	LEWISTON	ME	0-968	171	
299	ATHENS	GA	1-017	83			359	VALLEY STREAM	NY	0-968	312	

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360	YONKERS	NY	0.967	315					420	TEMPLE	TEX	0.911	430	
361	RALEIGH	NC	0.967	322					421	BEVERLY HILLS	CAL	0.910	19	
362	MOUNT VERNON	NY	0.967	300					422	OAK PARK	ILL	0.907	112	
363	MICHITA FALLS	TEX	0.966	433					423	CHICOPEE	MASS	0.907	181	
364	FORT DODGE	IOA	0.966	145					424	JACKSON	TENN	0.907	409	
365	SANTA ANA	CAL	0.966	44					425	ROYAL BAY	WIS	0.906	467	
366	LONG BEACH	CAL	0.965	26					426	GREEN OAK	MICH	0.905	223	
367	BRISTOL	CONN	0.964	54					427	TUSCALOOSA	ALA	0.901	7	
368	SOUTH GATE	CAL	0.963	47					428	MERIDEN	CONN	0.901	56	
369	ENDU	OKLA	0.962	361					429	ALHAMBRA	CAL	0.899	16	
370	MIDDLETOWN	OHIO	0.961	348					430	INGLEWOOD	CAL	0.897	25	
371	KENOSHA	WIS	0.961	468					431	LINCOLN	NEB	0.896	251	
372	CONCORD	NH	0.961	254					432	BURLINGTON	IOWA	0.893	138	
373	NEW BRITAIN	CONN	0.960	58					433	ST. PETERSBURG	FLA	0.891	78	
374	ROCK ISLAND	ILL	0.960	116					434	NEW ROCHELLE	NY	0.889	302	
375	RACINE	WIS	0.959	474					435	PARMA	OHIO	0.884	351	
376	TYLER	TEX	0.957	431					436	PALO ALTO	CAL	0.881	30	
377	STAMFORD	CONN	0.953	62					437	ELGIN	ILL	0.879	104	
378	INDIANAPOLIS	IND	0.952	127					438	WEST NEW YORK	NJ	0.879	283	
379	AUBURN	NY	0.952	290					439	MANITOWOC	WIS	0.878	471	
380	ALLENSTOWN	PENN	0.952	371					440	FOND DU LAC	WIS	0.878	466	
381	HAVERHILL	MASS	0.951	186					441	CLIFTON	NJ	0.875	362	
382	RAND CITY	MO	0.950	408					442	EAST CLEVELAND	OHIO	0.870	138	
383	WILKINSBURG	PENN	0.949	393					443	MAION	IND	0.869	307	
384	SANTA MONICA	CAL	0.949	46					444	ROSELAND	NY	0.868	307	
385	DECATUR	ILL	0.947	102					445	JEFFERSON CITY	MO	0.862	241	
386	STOUX FALLS	SD	0.947	407					446	NORTON	MASS	0.861	195	
387	WEST ELLIS	WIS	0.946	479					447	NORRINGTON	CONN	0.860	53	
388	LA CROSSE	WIS	0.945	469					448	PASADENA	CAL	0.859	326	
389	SANTA BARBARA	CAL	0.945	45					449	FARGO	ND	0.859	31	
390	BLOOMFIELD	NJ	0.945	260					450	APPLETON	WIS	0.859	463	
391	KANKAKEE	ILL	0.945	109					451	IOWA CITY	IOWA	0.857	146	
392	LAKE CHARLES	LA	0.945	166					452	GLENDALE	CAL	0.851	23	
393	COLUMBIA	MO	0.942	239					453	MAISON	WIS	0.847	470	
394	SAN MATEO	CAL	0.941	43					454	MAYWOOD	ILL	0.844	110	
395	UTICA	NY	0.941	311					455	NORWALK	CONN	0.843	61	
396	JOHNSON CITY	TENN	0.940	410					456	EAU CLAIRE	WIS	0.842	465	
397	TAUNTON	MASS	0.939	203					457	ST. CLOUD	MINN	0.841	229	
398	MOLINE	ILL	0.936	111					458	UNIVERSITY CITY	MO	0.839	247	
399	EUCLID	OHIO	0.934	340					459	CRANSTON	RI	0.833	396	
400	ALBANY	GA	0.934	82					460	WAUWATOSA	WIS	0.828	478	
401	BERWYN	ILL	0.934	96					461	SHAKER HEIGHTS	OHIO	0.825	354	
402	SAN DIEGO	CAL	0.930	39					462	EVANSTON	ILL	0.825	105	
403	WARWICK	RI	0.930	400					463	MIDDLETOWN	CONN	0.823	57	
404	GARFIELD	NJ	0.929	265					464	WINONA	MINN	0.822	231	
405	POMONA	CAL	0.928	32					465	MONTCLAIR	NJ	0.819	272	
406	SALINA	KAN	0.927	153					466	LYNWOOD	CAL	0.805	28	
407	AUSTIN	TEX	0.927	416					467	NORMAN	OKLA	0.795	364	
408	OSHKOSH	WIS	0.926	473					468	MIAMI BEACH	FLA	0.793	74	
409	BETHLEHEM	PENN	0.926	373					469	MELRESE	MASS	0.790	193	
410	WATERBURY	CONN	0.925	64					470	BERKELEY	CAL	0.754	18	
411	CHAMPAIGN	ILL	0.923	98					471	NUTLEY	NJ	0.740	275	
412	JAMESTOWN	NY	0.923	296					472	PROVO	UTAH	0.727	435	
413	EVERETT	MASS	0.922	182					473	EAST ORANGE	NJ	0.663	263	
414	CLEVELAND HEIGHTS	OHIO	0.922	334										
415	CUYAHOGA FALLS	OHIO	0.921	336										
416	WATERLOO	IOWA	0.921	150										
417	TOPEKA	KAN	0.917	154										
418	ANN ARBOR	MICH	0.916	206										
419	GALESBURG	ILL	0.913	106										

1950 CANCER MORT. RATE					CITIES RANKED BY 1950 MORTALITY RATE-CANCER (89)					STATE					PAGE				
RANK	CITY	STATE	MORT. RATE	PAGE	RANK	CITY	STATE	MORT. RATE	PAGE	RANK	CITY	STATE	MORT. RATE	PAGE	RANK	CITY	STATE	MORT. RATE	PAGE
1	BAKERSFIELD	CAL	1,552	17	60	ELIZABETH	NJ	1,235	264	60	ELIZABETH	NJ	1,235	264	61	BOSTON	MASS	1,234	177
2	SALEM	MASS	1,547	200	61	BOSTON	MASS	1,234	177	62	PITTSBURGH	PENN	1,232	387	62	PITTSBURGH	PENN	1,232	387
3	KEY WEST	FLA	1,463	71	62	PITTSBURGH	PENN	1,232	387	63	REDWOOD CITY	CAL	1,231	34	63	REDWOOD CITY	CAL	1,231	34
4	JERSEY CITY	NJ	1,455	269	64	ELMIRA	NY	1,227	293	64	ELMIRA	NY	1,227	293	65	BANGOR	ME	1,221	170
5	NEW BRUNSWICK	NJ	1,454	274	65	BANGOR	ME	1,221	170	66	BLOOMINGTON	ILL	1,219	97	66	BLOOMINGTON	ILL	1,219	97
6	VALLEJO	CAL	1,452	49	66	BLOOMINGTON	ILL	1,219	97	67	MELROSE	MASS	1,218	193	67	MELROSE	MASS	1,218	193
7	WASHINGTON	PENN	1,435	391	67	MELROSE	MASS	1,218	193	68	CHELSEA	MASS	1,215	180	68	CHELSEA	MASS	1,215	180
8	BUTTE	MONT	1,423	249	68	CHELSEA	MASS	1,215	180	69	NEW ORLEANS	LA	1,214	168	69	NEW ORLEANS	LA	1,214	168
9	NEWPORT	RI	1,417	397	69	NEW ORLEANS	LA	1,214	168	70	WATERBURY	CONN	1,214	64	70	WATERBURY	CONN	1,214	64
10	ROCHESTER	MINN	1,411	228	70	WATERBURY	CONN	1,214	64	71	LEWISTON	ME	1,212	171	71	LEWISTON	ME	1,212	171
11	HOBOKEN	NJ	1,406	267	71	LEWISTON	ME	1,212	171	72	GRAND RAPIDS	MICH	1,212	213	72	GRAND RAPIDS	MICH	1,212	213
12	EUGENE	ORE	1,404	367	72	GRAND RAPIDS	MICH	1,212	213	73	BALTIMORE	MD	1,211	173	73	BALTIMORE	MD	1,211	173
13	JOHNSTOWN	PENN	1,402	379	73	BALTIMORE	MD	1,211	173	74	CHARLESTON	SC	1,211	402	74	CHARLESTON	SC	1,211	402
14	ACKAWANNA	NY	1,393	278	74	CHARLESTON	SC	1,211	402	75	UNIVERSITY CITY	MO	1,210	247	75	UNIVERSITY CITY	MO	1,210	247
15	NEWARK	NJ	1,393	278	75	UNIVERSITY CITY	MO	1,210	247	76	ALBANY	NY	1,207	288	76	ALBANY	NY	1,207	288
16	EL PASO	TEX	1,347	271	76	ALBANY	NY	1,207	288	77	PEORIA	ILL	1,204	113	77	PEORIA	ILL	1,204	113
17	TUCSON	ARIZ	1,339	9	77	PEORIA	ILL	1,204	113	78	CLEVELAND	OHIO	1,203	333	78	CLEVELAND	OHIO	1,203	333
18	PERTH AMBOY	NJ	1,336	279	78	CLEVELAND	OHIO	1,203	333	79	PHILADELPHIA	PENN	1,201	386	79	PHILADELPHIA	PENN	1,201	386
19	BREMERTON	WASH	1,335	449	79	PHILADELPHIA	PENN	1,201	386	80	BUFFALO	NY	1,201	282	80	BUFFALO	NY	1,201	282
20	SCRANTON	PENN	1,325	389	80	BUFFALO	NY	1,201	282	81	KANKAKEE	ILL	1,201	459	81	KANKAKEE	ILL	1,201	459
21	ATLANTIC CITY	NJ	1,324	257	81	KANKAKEE	ILL	1,201	459	82	WILNAUKEE	WIS	1,201	245	82	WILNAUKEE	WIS	1,201	245
22	FALL RIVER	MASS	1,322	183	82	WILNAUKEE	WIS	1,201	245	83	LANCASTER	PENN	1,199	300	83	LANCASTER	PENN	1,199	300
23	WEST NEW YORK*	NJ	1,320	283	83	LANCASTER	PENN	1,199	300	84	SPRINGFIELD	MASS	1,198	202	84	SPRINGFIELD	MASS	1,198	202
24	EASTON	PENN	1,312	375	84	SPRINGFIELD	MASS	1,198	202	85	NEW LONDON	CONN	1,197	400	85	NEW LONDON	CONN	1,197	400
25	GARDEN	NJ	1,305	261	85	NEW LONDON	CONN	1,197	400	86	CINCINNATI	OHIO	1,196	332	86	CINCINNATI	OHIO	1,196	332
26	BAYONNE	NJ	1,298	258	86	CINCINNATI	OHIO	1,196	332	87	SCHENECTADY	NY	1,195	308	87	SCHENECTADY	NY	1,195	308
27	PARKERSBURG	WV	1,293	461	87	SCHENECTADY	NY	1,195	308	88	PROVIDENCE	RI	1,193	399	88	PROVIDENCE	RI	1,193	399
28	TAMPA	FLA	1,290	80	88	PROVIDENCE	RI	1,193	399	89	RENO	NEV	1,184	253	89	RENO	NEV	1,184	253
29	NEW YORK CITY	NY	1,287	303	89	RENO	NEV	1,184	253	90	TRENTON	NJ	1,183	281	90	TRENTON	NJ	1,183	281
30	BAY CITY	MICH	1,286	208	90	TRENTON	NJ	1,183	281	91	YORK	PENN	1,182	395	91	YORK	PENN	1,182	395
31	ROME	GA	1,285	89	91	YORK	PENN	1,182	395	92	HARRISBURG	PENN	1,181	377	92	HARRISBURG	PENN	1,181	377
32	SPRINGFIELD	ILL	1,283	117	92	HARRISBURG	PENN	1,181	377	93	MORGANTOWN	WV	1,181	460	93	MORGANTOWN	WV	1,181	460
33	UNION CITY	NJ	1,282	282	93	MORGANTOWN	WV	1,181	460	94	WARWICK	RI	1,179	400	94	WARWICK	RI	1,179	400
34	PLAINFIELD	NJ	1,277	280	94	WARWICK	RI	1,179	400	95	DANVILLE	MASS	1,177	201	95	DANVILLE	MASS	1,177	201
35	IOWA CITY	IOWA	1,275	146	95	DANVILLE	MASS	1,177	201	96	MANCHESTER	NH	1,174	101	96	MANCHESTER	NH	1,174	101
36	WILKES-BARRE	PENN	1,275	192	96	MANCHESTER	NH	1,174	101	97	FITCHBURG	MASS	1,173	255	97	FITCHBURG	MASS	1,173	255
37	EAST CHICAGO	IND	1,272	121	97	FITCHBURG	MASS	1,173	255	98	DUBUQUE	IOWA	1,172	184	98	DUBUQUE	IOWA	1,172	184
38	CHICAGO	ILL	1,271	99	98	DUBUQUE	IOWA	1,172	184	99	OSHKOSH	WIS	1,172	473	99	OSHKOSH	WIS	1,172	473
39	HOT SPRINGS	ARK	1,268	11	99	OSHKOSH	WIS	1,172	473	100	PITTSFIELD	MASS	1,169	197	100	PITTSFIELD	MASS	1,169	197
40	MAYWOOD	ILL	1,267	110	100	PITTSFIELD	MASS	1,169	197	101	WYANDOTT	MO	1,165	225	101	WYANDOTT	MO	1,165	225
41	JOLIET	ILL	1,267	108	101	WYANDOTT	MO	1,165	225	102	HAGERSTOWN	MICH	1,162	175	102	HAGERSTOWN	MICH	1,162	175
42	NEW KENSINGTON	PENN	1,266	384	102	HAGERSTOWN	MICH	1,162	175	103	KANSAS CITY	KAN	1,162	152	103	KANSAS CITY	KAN	1,162	152
43	PATTERSON	NJ	1,264	278	103	KANSAS CITY	KAN	1,162	152	104	CICERO	ILL	1,161	100	104	CICERO	ILL	1,161	100
44	HARTFORD	CONN	1,264	278	104	CICERO	ILL	1,161	100	105	CANTON	OHIO	1,161	331	105	CANTON	OHIO	1,161	331
45	ASSAULT	NJ	1,263	214	105	CANTON	OHIO	1,161	331	106	YOUNGSTOWN	OHIO	1,161	359	106	YOUNGSTOWN	OHIO	1,161	359
46	NEW BRIDGE	NJ	1,262	277	106	YOUNGSTOWN	OHIO	1,161	359	107	NEW BRITAIN	CONN	1,160	58	107	NEW BRITAIN	CONN	1,160	58
47	QUINCY	MASS	1,258	198	107	NEW BRITAIN	CONN	1,160	58	108	MAUKEGAN	ILL	1,159	118	108	MAUKEGAN	ILL	1,159	118
48	WINDSOCKET	RI	1,253	401	108	MAUKEGAN	ILL	1,159	118	109	DISTRICT OF COLUMBIA	DC	1,159	160	109	DISTRICT OF COLUMBIA	DC	1,159	160
49	HAZELTON	PENN	1,249	378	109	DISTRICT OF COLUMBIA	DC	1,159	160	110	WHEELING	WV	1,158	266	110	WHEELING	WV	1,158	266
50	CHESTER	PENN	1,248	376	110	WHEELING	WV	1,158	266	111	COVINGTON	LA	1,157	406	111	COVINGTON	LA	1,157	406
51	YONKERS	NY	1,248	315	111	COVINGTON	LA	1,157	406	112	SAFEBORO	MASS	1,156	248	112	SAFEBORO	MASS	1,156	248
52	KEARNY	NJ	1,247	38	112	SAFEBORO	MASS	1,156	248	113	SAN LEANRO	CAL	1,154	243	113	SAN LEANRO	CAL	1,154	243
53	SAN BERNARDINO	CAL	1,247	38	113	SAN LEANRO	CAL	1,154	243	114	EAST ORANGE	NJ	1,154	276	114	EAST ORANGE	NJ	1,154	276
54	NEW HAVEN	CONN	1,245	59	114	EAST ORANGE	NJ	1,154	276	115	NEW ROCHELLE	NY	1,153	302	115	NEW ROCHELLE	NY	1,153	302
55	ERIE	PENN	1,243	376	115	NEW ROCHELLE	NY	1,153	302	116					116				
56	KINGSTON	NY	1,242	297	116					117					117				
57	WINDSOCKET	RI	1,242	454	117					118					118				
58	LYNN	MASS	1,240	190	118					119					119				
59	PANTUCKET	RI	1,236	398	119														

RANK	CITY	STATE	1950		PAGE	(CANCER MORTALITY RATE CONT.)		CITY	STATE	MORT. RATE	PAGE
			CANCER MORT. RATE	(90)		RANK	RATE				
120	NEW ALBANY	IND	1.153	134		180	HOUSTON	TEX	1.102	424	
121	NORMALK	CONN	1.152	61		181	KOKOMO	IND	1.101	128	
122	FRESNO	CAL	1.151	22		182	AUGUSTA	GA	1.100	85	
123	LEBANON	PENN	1.151	381		183	SHARON	PENN	1.098	390	
124	NUTLEY	NJ	1.148	275		184	NEWPORT NEWS	VA	1.098	442	
125	EL PASO	TEX	1.148	421		185	SYRACUSE	NY	1.098	309	
126	SANTA BARBARA	CAL	1.148	45		186	YAKIMA	WASH	1.097	455	
127	INDIANAPOLIS	IND	1.148	127		187	MEDFORD	MASS	1.097	192	
128	IRVINGTON	NJ	1.147	268		188	WHITE PLAINS	NY	1.096	314	
129	DETROIT	MICH	1.147	210		189	KANSAS CITY	MO	1.096	243	
130	CLARKSBURG	WV	1.143	457		190	LOCKPORT	NY	1.095	299	
131	AURORA	ILL	1.142	94		191	CHAMPAIGN	ILL	1.094	98	
132	WHEELING	WV	1.141	462		192	NASHVILLE	TENN	1.092	413	
133	ST. PAUL	MINN	1.141	230		193	LOUISVILLE	KY	1.091	159	
134	GREAT FALLS	MONT	1.140	250		194	GLUCESTER	MASS	1.091	185	
135	STEBENVILLE	OHIO	1.138	356		195	SAN FRANCISCO	CAL	1.091	40	
136	NEW BEDFORD	MASS	1.138	194		196	EAST CLEVELAND	OHIO	1.090	358	
137	GARFIELD	NJ	1.137	265		197	FLINT	MICH	1.090	212	
138	JACKSON	MICH	1.137	216		198	MARTIN	IND	1.089	130	
139	MALDEN	MASS	1.137	191		199	ST. CLOUD	MINN	1.089	229	
140	SEATTLE	WASH	1.136	451		200	JOPLIN	MO	1.087	242	
141	BRIDGEPORT	CONN	1.135	53		201	PORTSMOUTH	OHIO	1.087	242	
142	STOCKTON	CAL	1.134	48		202	ELYRIA	OHIO	1.086	352	
143	CLINTON	IOWA	1.134	140		203	INGLEWOOD	CAL	1.085	339	
144	COVINGTON	KY	1.133	137		204	ALBANY	GA	1.084	25	
145	MERIDEN	CONN	1.133	56		205	ROCHESTER	NY	1.083	82	
146	DAYTON	OHIO	1.132	337		206	MONTCLAIR	NJ	1.082	306	
147	TOLEDO	OHIO	1.132	357		207	COLORADO SPRINGS	COLO	1.082	272	
148	BERNAY	ILL	1.130	96		208	EVANSTON	ILL	1.081	105	
149	FORT WAYNE	IND	1.130	124		209	ANNISTON	ALA	1.081	1	
150	MAUMATOSA	WIS	1.130	478		210	TERRE HAUTES	IND	1.080	137	
151	MACON	GA	1.129	88		211	LAKE CHARLES	LA	1.079	166	
152	MISHAWAKA	IND	1.128	132		212	MIAMI	FLA	1.078	73	
153	MICHIGAN CITY	IND	1.128	131		213	BELLEVILLE	NJ	1.078	259	
154	OAK PARK	ILL	1.128	112		214	MOLINE	ILL	1.076	111	
155	BARBERTON	OHIO	1.128	330		215	LAKEMOOD	OHIO	1.075	342	
156	HARTFORD	CONN	1.125	55		216	DURHAM	NC	1.074	318	
157	DES MOINES	IOWA	1.124	143		217	ALTIQUIPPA	PENN	1.074	370	
158	GALVESTON	TEX	1.124	423		218	BETHLEHEM	PENN	1.072	373	
159	LAFAYETTE	IND	1.123	129		219	ALTON	ILL	1.071	93	
160	FORT LAUDERDALE	FLA	1.119	68		220	SAGINAW	MICH	1.070	224	
161	BLOOMFIELD	NJ	1.119	260		221	VALLEY STREAM	NY	1.070	312	
162	REDONDO BEACH	CAL	1.117	33		222	HIGHLAND PARK	MICH	1.068	215	
163	CHARLESTON	WV	1.115	456		223	BROCKTON	MASS	1.068	178	
164	CLIFTON	NJ	1.114	262		224	NEWTON	MASS	1.067	195	
165	LAWRENCE	MASS	1.111	188		225	DULUTH	MINN	1.067	226	
166	PORTLAND	ME	1.111	172		226	MOUNT VERNON	NY	1.067	300	
167	ATHENS	GA	1.110	83		227	HAMMOND	IND	1.066	126	
168	PENSACOLA	FLA	1.110	77		228	REVERE	MASS	1.066	199	
169	WORCESTER	MASS	1.109	205		229	MARTON	OHIO	1.065	346	
170	TROY	NY	1.107	310		230	WATERTOWN	NY	1.064	313	
171	PHOENIX	ARIZ	1.107	8		231	SANDUSKY	OHIO	1.064	353	
172	RACINE	WIS	1.107	474		232	OMAHA	NEB	1.063	252	
173	POMONA	CAL	1.105	32		233	WINSTON-SALEM	NC	1.061	325	
174	RIVERSIDE	CAL	1.105	36		234	SPRINGFIELD	OHIO	1.060	355	
175	RICHMOND	VA	1.105	446		235	ITHACA	NY	1.060	295	
176	AMSTERDAM	NY	1.104	289		236	CHARLOTTESVILLE	VA	1.060	439	
177	BLOOMINGTON	IND	1.103	120		237	MUNCIE	IND	1.060	133	
178	GARY	IND	1.102	125		238	SAN MATEO	CAL	1.059	43	
179	LORAIN	OHIO	1.102	344		239	LOS ANGELES	CAL	1.058	27	

RANK	CITY	STATE	1950		PAGE	(CANCER MORTALITY RATE CONT.)		RANK	CITY	STATE	MORT. RATE		PAGE
			CANCER MORT.	RATE		(31)	RATE						
240	WALTHAM	MASS	1.057	204				300	DAYTONA BEACH	FLA	1.014	67	
241	LAKELAND	FLA	1.057	72				301	NORHAMPTON	MASS	1.014	196	
242	NORTH LITTLE ROCK	ARK	1.057	13				302	NORWOOD	OHIO	1.014	350	
243	NIAGARA FALLS	NY	1.056	304				303	ROYAL OAK	MICH	1.012	223	
244	HUNTINGTON	WV	1.056	459				304	COLUMBUS	GA	1.012	86	
245	AKRON	OHIO	1.055	328				305	ASHLAND	KY	1.011	156	
246	MCKEESPORT	PENN	1.053	382				306	NEW CASTLE	PENN	1.011	383	
247	HIGH POINT	NC	1.052	321				307	PUEBLO	COLOR	1.010	92	
248	ALAMEDA	CAL	1.051	15				308	TORRINGTON	CONN	1.010	63	
249	SOUTH GATE	CAL	1.051	47				309	SAVANNAH	GA	1.008	90	
250	BELLEVIEW	ILL	1.050	95				310	SPRINGHAM	ALA	1.008	3	
251	QUINCY	ILL	1.050	114				311	SPARTANBURG	SC	1.008	405	
252	LINCOLN	NEB	1.050	251				312	BELLINGHAM	WASH	1.006	448	
253	PORTLAND	ORE	1.050	368				313	EVERETT	WASH	1.005	450	
254	SUPERIOR	WIS	1.049	476				314	HAMILTON	OHIO	1.004	341	
255	PETERSBURG	VA	1.048	444				315	CHEYENNE	WY	1.004	480	
256	GAINSVILLE	FLA	1.048	69				316	LEXINGTON	KY	1.004	158	
257	OAKLAND	CAL	1.047	29				317	CHATTANOOGA	TENN	1.003	408	
258	STIOUX CITY	IOWA	1.046	149				318	NORFOLK	VA	1.003	443	
259	SANTA MONICA	CAL	1.046	46				319	SHEBOYGAN	WIS	1.002	475	
260	HAVERHILL	MASS	1.046	186				320	WICHITA	KAN	1.002	155	
261	COLUMBIA	SC	1.046	403				321	ALEXANDRIA	LA	1.001	163	
262	SOUTH BEND	IND	1.044	136				322	FORT WORTH	TEX	1.001	422	
263	SHREVEPORT	LA	1.044	165				323	SHAKER HEIGHTS	OHIO	1.000	354	
264	STAMFORD	CONN	1.043	62				324	EVANSVILLE	IND	1.000	123	
265	MUSKEGON	MICH	1.042	220				325	RUBENK	CAL	0.999	20	
266	JACKSONVILLE	FLA	1.042	70				326	KENDSHA	WIS	0.999	468	
267	LIMA	OHIO	1.042	343				327	TACOMA	WASH	0.998	453	
268	SAN ANTONIO	TEX	1.041	429				328	HUNTINGTON PARK	CAL	0.997	24	
269	MOBILE	ALA	1.041	5				329	ANDERSON	IND	0.995	119	
270	DAVENPORT	IOWA	1.039	142				330	MIDDLETOWN	OHIO	0.990	348	
271	COLUMBUS	OHIO	1.037	335				331	MANFIELD	OHIO	0.989	345	
272	WILLIAMSPORT	PENN	1.036	394				332	ROCK ISLAND	ILL	0.988	116	
273	RICHMOND	IND	1.036	135				333	LYNCHBURG	VA	0.987	441	
274	TAUNTON	MASS	1.036	203				334	BINGHAMTON	NY	0.987	291	
275	DEARBORN	MICH	1.034	209				335	ALLIANCE	OHIO	0.987	329	
276	SAN JOSE	CAL	1.034	41				336	AUBURN	NY	0.986	290	
277	RAPID CITY	SD	1.034	406				337	FOND DU LAC	WIS	0.985	466	
278	CUYAHOGA FALLS	OHIO	1.032	336				338	OKLAHOMA CITY	OKLA	0.985	365	
279	MINNEAPOLIS	MINN	1.032	227				339	WARREN	OHIO	0.979	358	
280	ORLANDO	FLA	1.032	75				340	PORT HURON	MICH	0.979	222	
281	CUMBERLAND	MD	1.031	174				341	SPRINGFIELD	MO	0.977	246	
282	CEDAR RAPIDS	IOWA	1.031	139				342	MONROE	LA	0.977	167	
283	WILMINGTON	NC	1.030	324				343	BEAUMONT	TEX	0.977	417	
284	LOWELL	MASS	1.029	189				344	LAREDO	TEX	0.973	425	
285	LINCOLN PARK	MICH	1.029	219				345	LYNWOOD	CAL	0.973	28	
286	SACRAMENTO	CAL	1.027	37				346	CLEVELAND HEIGHTS	OHIO	0.971	334	
287	ALTONA	PENN	1.026	372				347	SALT LAKE CITY	UTAH	0.966	436	
288	KNOXVILLE	TENN	1.023	411				348	FAIRMONT	WV	0.965	458	
289	ROCKFORD	ILL	1.023	115				349	ENID	OKLA	0.965	361	
290	EAST ST. LOUIS	ILL	1.021	103				350	CHARLOTTE	NC	0.965	317	
291	PARMA	OHIO	1.021	351				351	TOPEKA	KAN	0.965	154	
292	BRISTOL	CONN	1.020	54				352	HOLYOKE	MASS	0.964	187	
293	EVERETT	PENN	1.019	182				353	READING	PENN	0.964	388	
294	SALINA	KAN	1.019	153				354	DENVER	COLOR	0.960	501	
295	ROANOK	VA	1.019	447				355	ANN ARBOR	MICH	0.959	206	
296	BESEMER	ALA	1.017	2				356	UTICA	NY	0.958	311	
297	PORT ARTHUR	TEX	1.016	427				357	MONTGOMERY	ALA	0.957	6	
298	POCATTELLO	ID	1.015	92				358	ALLEN TOWN	PENN	0.956	371	
299	RICHMOND	CAL	1.015	35				359	CORPUS CHRISTI	TEX	0.955	419	

(CANCER MORTALITY RATE CONT.)									
(32)									
RANK	CITY	STATE	1950 CANCER MORT. RATE	PAGE					
					RATE	CITY	STATE	MORT. RATE	PAGE
360	WAUSAU	WIS	0.955	477	420	MANITOWOC	WIS	0.878	471
361	BOISE	ID	0.955	91	421	BILLINGS	MONT	0.877	248
362	WINONA	MINN	0.954	231	422	VICKSBURG	MISS	0.876	238
363	ABILENE	TEX	0.954	414	423	GRANITE CITY	ILL	0.875	107
364	DECATUR	ILL	0.953	102	424	ALBUQUERQUE	NM	0.872	285
365	BEVERLY	MASS	0.952	176	425	CRANSTON	RI	0.867	396
366	SAN DIEGO	CAL	0.950	39	426	WILKINSBURG	PENN	0.867	393
367	TULSA	OKLA	0.950	366	427	NEWARK	OHIO	0.865	349
368	NORRISTOWN	PENN	0.949	385	428	MUSKOGEE	OKLA	0.863	363
369	CHICOPEE	MASS	0.948	181	429	WACC	TEX	0.862	432
370	ST. JOSEPH	MO	0.946	244	430	BURLINGTON	IOWA	0.859	138
371	INDEPENDENCE	MO	0.946	240	431	RALEIGH	NC	0.859	322
372	PADUCAH	KY	0.945	162	432	PORTSMOUTH	VA	0.854	445
373	DAVILL	VA	0.945	440	433	HUTCHINSON	KAN	0.852	151
374	ROSWELL	NM	0.944	286	434	GREENVILLE	MISS	0.846	233
375	DALLAS	TEX	0.942	420	435	JACKSON	MISS	0.845	235
376	JAMESTOWN	NY	0.940	296	436	PALD ALTO	CAL	0.845	30
377	LITTLE ROCK	ARK	0.940	12	437	CONCORD	NH	0.843	254
378	NASHUA	NH	0.938	256	438	KALAMAZOO	MICH	0.839	217
379	PASADENA	CAL	0.938	31	439	BELGIT	WIS	0.838	464
380	ELGIN	ILL	0.937	104	440	TEMPLE	TEX	0.837	232
381	GREENSBORO	NC	0.934	320	441	LAFAYETTE	TEX	0.833	430
382	BERKELEY	CAL	0.933	19	442	LAFAYETTE	TEX	0.828	423
383	SERIDIAN	MISS	0.932	237	443	ROCKY MOUNT	NC	0.821	363
384	SALENA	OHIO	0.929	360	445	WEST PALM BEACH	FLA	0.815	81
385	NEWELL	OHIO	0.926	483	446	PINE BLUFF	ARK	0.813	14
386	APLETON	WIS	0.926	433	447	GADSDEN	ALA	0.803	236
387	PORTAC	MICH	0.925	221	448	LAUREL	MISS	0.798	416
388	GALESBURG	ILL	0.923	106	449	AUSTIN	TEX	0.798	416
389	BATON ROUGE	LA	0.922	164	450	BROWNSVILLE	TEX	0.796	418
390	SPOKANE	WASH	0.922	452	451	TUSCALOOSA	ALA	0.791	7
391	JACKSON	TENN	0.921	409	452	EUCLID	OHIO	0.782	340
392	MASSILLON	OHIO	0.919	347	453	LANTON	OKLA	0.774	78
393	SANTA ANA	CAL	0.919	44	454	ST. PETERSBURG	FLA	0.774	57
394	LONG BEACH	CAL	0.918	26	455	MIDDLETOWN	CONN	0.756	161
395	AMARILLO	TEX	0.917	415	456	OWENSBORO	KY	0.756	161
396	SIoux FALLS	SD	0.916	407	457	MASON CITY	IOWA	0.752	147
397	OTTUMWA	IOWA	0.916	148	458	SANTA FE	NM	0.747	287
398	BATTLE CREEK	MICH	0.916	207	459	FAYETTEVILLE	NC	0.743	319
399	GLENDALE	CAL	0.916	23	460	FERNDALE	MICH	0.733	211
400	WICHITA FALLS	TEX	0.911	433	461	TYLER	TEX	0.731	431
401	LA CROSSE	WIS	0.909	469	462	LUBBOCK	TEX	0.729	426
402	FORT DODGE	IOWA	0.909	145	463	OGDEN	UTAH	0.720	434
403	HATTIESBURG	MISS	0.905	234	464	JOHNSON CITY	TENN	0.718	410
404	MEMPHIS	TENN	0.904	412	465	JEFFERSON CITY	MO	0.704	241
405	MADISON	WIS	0.903	47C	466	TALLAHASSEE	FLA	0.700	79
406	FORT SMITH	ARK	0.902	10	467	WATERLOO	IOWA	0.692	150
407	BURLINGTON	VT	0.901	437	468	GRAND FORKS	ND	0.690	327
408	ALHAMBRA	CAL	0.896	16	469	COLUMBIA	MO	0.683	239
409	COMPTON	CAL	0.895	21	470	PROVO	UTAH	0.656	435
410	ROME	NY	0.895	307	471	BEVERLY HILLS	CAL	0.650	19
411	EAU CLAIRE	WIS	0.895	465	472	NORMAN	OKLA	0.626	364
412	PANAMA CITY	FLA	0.894	76	473	MIAMI BEACH	FLA	0.606	74
413	FARGO	ND	0.890	326					
414	ASHEVILLE	NC	0.889	316					
415	COUNCIL BLUFFS	IOWA	0.889	141					
416	ELKHART	IND	0.887	122					
417	LAFAYETTE	LA	0.885	165					
418	LANSING	MICH	0.885	218					
419	GREEN BAY	WIS	0.880	467					

1960 CITIES RANKED BY 1960 MORTALITY RATE-CANCER						(93)		
RANK	CITY	STATE	CANCER MORT. RATE	PAGE	RANK	CITY	STATE	CANCER MORT. RATE
1	NEWBURGH	NY	1.599	301	60	REXWOOD CITY	CAL	1.225
2	VALLEY STREAM	NY	1.472	312	61	ST. LOUIS	MO	1.224
3	HAGERSTOWN	MD	1.471	175	62	NEW YORK CITY	NY	1.222
4	ALQUIPPA	PENN	1.430	370	63	NEW YORK CITY	NY	1.218
5	GAINESVILLE	FLA	1.387	69	64	NEW YORK CITY	IND	1.217
6	WHITE PLAINS	NY	1.372	314	65	DURHAM	NC	1.217
7	BAYONNE	NJ	1.370	226	66	FALL RIVER	MASS	1.215
8	NEWPORT	NJ	1.359	160	67	CINCINNATI	OHIO	1.215
9	NEWPORT	RI	1.358	191	68	BUFFALO	NY	1.215
10	SELSEY CITY	ND	1.353	269	69	HARTFORD	CONN	1.214
11	LEBANON	PENN	1.350	381	70	CHICAGO	ILL	1.213
12	CHESTER	PENN	1.350	374	71	LEWISTON	ME	1.207
13	BESSEMER	ALA	1.343	2	72	JACKSON	OHIO	1.207
14	JOHNSTOWN	PENN	1.336	379	73	NEW CASTLE	MICH	1.206
15	BUTTE	MONT	1.326	249	74	WCONSOCKET	PENN	1.206
16	CHELSEA	MASS	1.323	180	75	SPRINGFIELD	RI	1.206
17	PANAMA CITY	FLA	1.323	76	76	BAKERSFIELD	OHIO	1.205
18	AURORA	ILL	1.321	94	77	SCHENECTADY	CAL	1.202
19	HARRISBURG	PENN	1.319	377	78	YOUNGSTOWN	NY	1.200
20	WASHINGTON	PENN	1.314	391	79	LYNN	OHIO	1.200
21	NEWARK	NJ	1.314	273	80	ORANGE	MASS	1.199
22	BAY CITY	MICH	1.313	208	81	BOSTON	NJ	1.198
23	NEW BRUNSWICK	NJ	1.309	274	82	INGLEWOOD	MASS	1.198
24	SCRANTON	PENN	1.309	389	83	DANVILLE	ILL	1.196
25	LACKAMANNA	NY	1.307	298	84	GARFIELD	CAL	1.192
26	PERTH AMBOY	NJ	1.305	279	85	ATLANTIC CITY	NJ	1.192
27	MCKEESPORT	PENN	1.305	382	86	NEW ROCHELLE	NY	1.191
28	COVINGTON	KY	1.301	157	87	KEY WEST	FLA	1.189
29	BRIDGEPORT	CONN	1.301	53	88	YORK	PENN	1.189
30	HACKENSACK	NJ	1.300	266	89	WHEELING	WV	1.188
31	LIMA	OHIO	1.299	343	90	STAMFORD	CONN	1.187
32	EAST ST. LOUIS	ILL	1.297	103	91	MALDEN	MASS	1.187
33	BARBERTON	OHIO	1.296	330	92	NUTLEY	MASS	1.185
34	SANDUSKY	OHIO	1.294	353	93	ANNISTON	ALA	1.185
35	MORGANTOWN	WV	1.290	460	94	HAZELTON	PENN	1.182
36	PITTSBURGH	PENN	1.289	387	95	DISTRICT OF COLUMBIA	MASS	1.181
37	ELIZABETH	NJ	1.278	284	96	SALEM	MASS	1.180
38	BALTIMORE	MD	1.274	173	97	FRANKTON	IND	1.179
39	HOBOKEN	NJ	1.270	267	98	CHICAGO	IND	1.179
40	KEARNY	NJ	1.269	282	99	ELSTON	IND	1.179
41	NEWARK	NJ	1.268	282	100	BELOIT	WIS	1.178
42	FERDIALE	MICH	1.265	211	101	NEWPORT	RI	1.176
43	CLEVELAND	OHIO	1.261	333	102	TORRINGTON	CONN	1.175
44	PATTERSON	CA	1.260	278	103	HAMTRACK	MICH	1.173
45	LAFAYETTE	LA	1.258	165	104	WEST NEW YORK	MASS	1.169
46	CAMDEN	NJ	1.257	261	105	RENO	NEV	1.168
47	ERIE	PENN	1.255	376	106	WATERBURY	CONN	1.168
48	SPRINGFIELD	ILL	1.254	117	107	EAST ORANGE	NY	1.166
49	LAWRENCE	MASS	1.252	188	108	NIAGARA FALLS	NY	1.165
50	PLAINFIELD	NJ	1.250	280	109	SACRAMENTO	CAL	1.163
51	TROY	NY	1.245	310	110	PORTLAND	ME	1.162
52	BELLEVILLE	ILL	1.243	95	111	LANCASTER	PENN	1.162
53	OWENSBORO	KY	1.241	161	112	BATTLE CREEK	MICH	1.162
54	PROVIDENCE	RI	1.241	399	113	NORFOLK	VA	1.159
55	PHILADELPHIA	PENN	1.239	386	114	LOUISVILLE	KY	1.158
56	NEW ORLEANS	LA	1.237	168	115	ALBANY	NY	1.157
57	TRENTON	NJ	1.236	281	116	VALLEJO	CAL	1.156
58	LINCOLN PARK	MICH	1.225	219	117	QUINCY	MASS	1.155
59	LINDEN	NJ	1.225	271	118	CLIFTON	MASS	1.154
					119	YONKERS	NY	1.153

1360					(CANCER MORTALITY RATE CONT.)					CANCER				
RANK	CITY	STATE	CANCER MORT. RATE	PAGE	RANK	CITY	STATE	MORT. RATE	PAGE	RANK	CITY	STATE	MORT. RATE	PAGE
120	BETHLEHEM	PENN	1-153	373	180	SYRACUSE	NY	1-111	309					
121	PLUMCKET	RI	1-153	398	181	HOT SPRINGS	ARK	1-111	97					
122	MERIDEN	CONN	1-151	56	182	BLOOMINGTON	ILL	1-110	97					
123	PERDUE	ILL	1-151	113	183	WEDEGRO	MASS	1-110	192					
124	OAK PARK	ILL	1-150	112	184	BELEVILLE	NJ	1-108	259					
125	ALTCONA	PENN	1-150	372	185	BELEVILLE	CAL	1-108	35					
126	CUMBERLAND	MD	1-149	174	186	HARWICK	NY	1-107	400					
127	DETROIT	MICH	1-149	210	187	AMSTERDAM	RI	1-105	289					
128	KRON	OHIO	1-147	328	188	INDIANAPOLIS	IND	1-105	127					
129	KANKAKEE	ILL	1-147	109	189	SCMERVILLE	MASS	1-104	201					
130	CHARLESTON	SC	1-146	402	190	CANTON	OHIO	1-104	331					
131	SPARTANBURG	SC	1-145	405	191	DULUTH	MINN	1-103	226					
132	NEW HAVEN	CONN	1-145	59	192	HINONA	MINN	1-103	231					
133	KANSAS CITY	KAN	1-143	152	193	SAGINAW	MICH	1-102	224					
134	SAN FRANCISCO	CAL	1-143	40	194	MONTCLAIR	NJ	1-102	272					
135	PASSAIC	NJ	1-140	277	195	ALEXANDRIA	LA	1-102	163					
136	NORWOOD	OHIO	1-139	350	196	FORT WAYNE	IND	1-101	124					
137	SUPERIOR	WIS	1-139	476	197	BLCCMFELD	NJ	1-101	260					
138	CHARLOTTESVILLE	VA	1-138	439	198	NEWTON	MASS	1-100	195					
139	NASHUA	NH	1-138	256	199	HOLYCKE	MASS	1-100	187					
140	UNIVERSITY CITY	MO	1-137	247	200	NEW BEDFORD	MASS	1-099	194					
141	MUNCIE	IND	1-137	133	201	RICHMOND	MASS	1-099	194					
142	ELMIRA	NY	1-136	293	202	HAMILTON	OHIO	1-098	341					
143	NEW BRITAIN	CONN	1-135	58	203	GRAND RAPIDS	MICH	1-098	213					
144	GALVESTON	TEX	1-134	423	204	TULSA	OKLA	1-097	366					
145	EASTON	PENN	1-133	375	205	DAYTON	OHIO	1-097	337					
146	MILWAUKEE	WIS	1-133	472	206	SPRINGFIELD	MASS	1-097	202					
147	MIAMI	FLA	1-132	73	207	OMAHA	NEB	1-097	252					
148	REVERE	MASS	1-130	199	208	TERRE HAUTE	IND	1-096	137					
149	GREENVILLE	SC	1-130	404	209	FITCHBURG	MASS	1-095	184					
150	READING	PENN	1-130	388	210	BROCKTON	MASS	1-094	178					
151	LEXINGTON	KY	1-129	158	211	SHREVEPORT	LA	1-094	169					
152	DECATUR	ILL	1-128	102	212	SEATTLE	WASH	1-094	451					
153	JACKSONVILLE	FLA	1-127	70	213	RACINE	WIS	1-094	474					
154	MANCHESTER	NH	1-127	255	214	QUINCY	ILL	1-093	114					
155	WARREN	OHIO	1-126	358	215	AUGUSTA	GA	1-092	85					
156	JOLIET	ILL	1-126	108	216	HAVERHILL	MASS	1-091	386					
157	KINGSTON	NY	1-124	297	217	STEUBENVILLE	OHIO	1-091	156					
158	ST. PAUL	MINN	1-124	230	218	INDEPENDENCE	MO	1-090	240					
159	LORAIN	OHIO	1-122	344	219	WAUKESHA	ILL	1-090	118					
160	MYANDOTTE	MICH	1-121	225	220	ORLANDO	FLA	1-090	75					
161	PORT HURON	OHIO	1-121	335	221	NORWALK	CONN	1-090	61					
162	PORT HURON	MICH	1-121	522	222	NEW LONDON	CONN	1-090	60					
163	WILKESBARRE	PEN	1-119	182	223	CLINTON	TOWA	1-089	150					
164	EVERETT	MASS	1-119	182	224	CHESBROUGH	MASS	1-089	425					
165	ATHENS	GACH	1-118	83	225	PORTSMOUTH	VA	1-089	245					
166	FLINT	MICH	1-118	212	226	COLUMBIA	MO	1-089	239					
167	ALBANY	PENN	1-117	371	227	NEWPORT NEWS	VA	1-088	442					
168	LOCKPORT	NY	1-117	299	228	DAYTONA BEACH	FLA	1-088	467					
169	ROCKFORD	ILL	1-117	115	229	OTTUMWA	TOWA	1-087	148					
170	LOWELL	MASS	1-116	189	230	SHEBOYGAN	WIS	1-087	475					
171	TOLEDO	OHIO	1-114	357	231	MACON	GA	1-086	88					
172	BINGHAMTON	NY	1-114	291	232	BERWYN	ILL	1-082	96					
173	PITTSFIELD	MASS	1-114	197	233	WILLIAMSPORT	PENN	1-082	394					
174	CICERO	ILL	1-114	100	234	LANSING	MICH	1-080	218					
175	BRISTOL	CONN	1-113	54	235	CEDAR RAPIDS	TOWA	1-080	139					
176	VANCOUVER	WASH	1-113	454	236	ANDERSON	IND	1-078	119					
177	TACOMA	WASH	1-112	453	237	MONROE	LA	1-077	167					
178	CUYAHOGA FALLS	OHIO	1-112	336	238	PARMA	OHIO	1-077	351					
179	SHARON	PENN	1-112	390	239	WEST ELLIS	WIS	1-074	479					

RANK	CITY	STATE	1960 CANCER			(CANCER MORTALITY RATE (CONT.))			RANK	CITY	STATE	CANCER		
			MORT.	RATE	PAGE	(95)	MORT.	RATE				MORT.	RATE	PAGE
240	ALTON	ILL	1-074	93			1-074	93	300	MOBILE	ALA	1-028	5	
241	NASHVILLE	TENN	1-072	413			1-072	413	301	REDONDO BEACH	CAL	1-028	33	
242	ROCHESTER	NY	1-072	306			1-072	306	302	MISHAWAKA	IND	1-027	132	
243	FAYETTE	IND	1-068	129			1-068	129	303	CLARKSBURG	WV	1-027	457	
244	BEVERLY	MASS	1-066	176			1-066	176	304	JAMESTOWN	NY	1-026	296	
245	DES MOINES	IOWA	1-065	143			1-065	143	305	BELL INGHAM	WASH	1-025	448	
246	MOLINE	ILL	1-063	111			1-063	111	306	SANTA FE	NM	1-025	287	
247	HAMMOND	IND	1-063	126			1-063	126	307	BLOOMINGTON	IND	1-024	120	
248	ROME	GA	1-063	89			1-063	89	308	MELROSE	MASS	1-024	193	
249	MEMPHIS	TENN	1-060	412			1-060	412	309	SAN MATEO	CAL	1-024	43	
250	CHATTANOOGA	TENN	1-060	408			1-060	408	310	BURLINGTON	VT	1-023	437	
251	EAST CLEVELAND	OHIO	1-060	338			1-060	338	311	BEVERLY HILLS	CAL	1-022	19	
252	MCUNT VERNON	NY	1-059	300			1-059	300	312	SAN ANTONIO	TEX	1-021	422	
253	MUSKOGEE	OKLA	1-059	363			1-059	363	313	MINNEAPOLIS	MINN	1-020	227	
254	KANSAS CITY	MO	1-057	243			1-057	243	314	OKLAHOMA CITY	OKLA	1-019	365	
255	GRANITE CITY	ILL	1-057	107			1-057	107	315	HOUSTON	TEX	1-019	424	
256	TYLER	TEX	1-056	431			1-056	431	316	EVANSTON	ILL	1-018	105	
257	SIoux FALLS	SD	1-053	407			1-053	407	317	LYNNWOOD	CAL	1-017	28	
258	TALLAHASSEE	FLA	1-053	79			1-053	79	318	EVANSVILLE	IND	1-017	123	
259	WORCESTER	MASS	1-052	205			1-052	205	319	JEFFERSON CITY	MO	1-015	241	
260	GREEN BAY	WIS	1-052	467			1-052	467	320	EVERETT	WASH	1-015	450	
261	WILMINGTON	NC	1-052	324			1-052	324	321	LAKEWOOD	OHIO	1-014	342	
262	ELYRIA	OHIO	1-051	339			1-051	339	322	MIDDLETOWN	OHIO	1-014	348	
263	KNOXVILLE	TENN	1-050	411			1-050	411	323	CAL BERNARDINO	CAL	1-013	38	
264	ASHLAND	KY	1-050	156			1-050	156	324	GREENVILLE	MISS	1-012	233	
265	LOS ANGELES	CAL	1-050	27			1-050	27	325	FORT LAUDERDALE	FLA	1-011	68	
266	GLOUCESTER	MASS	1-049	185			1-049	185	326	WINSTON-SALEM	NC	1-011	325	
267	KENOSHA	WIS	1-049	468			1-049	468	327	FOND DU LAC	WIS	1-010	466	
268	YAKIMA	WASH	1-048	455			1-048	455	328	MANFIELD	OHIO	1-010	345	
269	TAMPA	FLA	1-048	80			1-048	80	329	SAN LEANDRO	CAL	1-010	42	
270	SOUTH BEND	IND	1-046	136			1-046	136	330	IOWA CITY	IOWA	1-010	146	
271	CORPUS CHRISTI	TEX	1-045	419			1-045	419	331	TAUNTON	MASS	1-010	203	
272	FAYETTEVILLE	NC	1-044	319			1-044	319	332	WICHITA	KAN	1-010	155	
273	FAYETTEVILLE	TEX	1-043	427			1-043	427	333	MAYWOOD	ILL	1-009	111	
274	ALHAMBRA	CAL	1-043	16			1-043	16	334	LAKELAND	FLA	1-009	72	
275	ROCK ISLAND	ILL	1-042	116			1-042	116	335	MUSKOGEE	MICH	1-008	220	
276	MICHIGAN CITY	IND	1-041	131			1-041	131	336	DAVENPORT	IOWA	1-007	142	
277	RIVERSIDE	CAL	1-041	36			1-041	36	337	ALAMEDA	CAL	1-006	15	
278	BEAUMONT	TEX	1-041	417			1-041	417	338	STIOUX CITY	IOWA	1-006	149	
279	BATON ROUGE	LA	1-040	164			1-040	164	339	GREENSBORO	NC	1-006	320	
280	WEST PALM BEACH	FLA	1-039	81			1-039	81	340	BIRMINGHAM	ALA	1-005	3	
281	OSHKOSH	WIS	1-039	473			1-039	473	341	POCAHELLO	IDA	1-004	92	
282	JOPLIN	MO	1-038	242			1-038	242	342	OKLAND	CAL	1-004	29	
283	AUBURN	NY	1-038	290			1-038	290	343	MASSILLON	OHIO	1-004	347	
284	COMPTON	CAL	1-037	21			1-037	21	344	CUNCIL BLUFFS	IOWA	1-001	141	
285	KOKOMO	IND	1-036	128			1-036	128	345	PENSACOLA	FLA	1-000	77	
286	BILLINGS	MONT	1-036	248			1-036	248	346	MANITOWOC	WIS	1-000	471	
287	DALLAS	TEX	1-035	420			1-035	420	347	HUNTINGTON	WV	0-999	459	
288	LA GRANGE	GA	1-034	87			1-034	87	348	WALTHAM	MASS	0-999	204	
289	HIGHLAND PARK	MICH	1-033	215			1-033	215	349	MONTGOMERY	ALA	0-999	6	
290	LITTLE ROCK	ARK	1-033	12			1-033	12	350	LONG BEACH	CAL	0-997	26	
291	LAKE CHARLES	LA	1-033	166			1-033	166	351	COLUMBIA	SC	0-997	403	
292	ROCKY MOUNT	NC	1-032	323			1-032	323	352	ZANESVILLE	OHIO	0-997	360	
293	PORTLAND	ORE	1-031	368			1-031	368	353	WACO	TEX	0-996	432	
294	BREMERTON	WASH	1-031	449			1-031	449	354	SAN JOSE	CAL	0-994	41	
295	ASHEVILLE	NC	1-030	316			1-030	316	355	SAN DIEGO	CAL	0-993	39	
296	CHARLESTON	WV	1-030	456			1-030	456	356	ROCHESTER	MINN	0-993	228	
297	WATERLOO	IOWA	1-029	150			1-029	150	357	EUGENE	ORE	0-992	367	
298	ANN ARBOR	MICH	1-029	206			1-029	206	358	DANVILLE	VA	0-992	440	
299	PONTIAC	MICH	1-029	221			1-029	221	359	FAYMONT	WV	0-991	458	

1960 CANCER				(CANCER MORTALITY RATE CONT.)				CANCER			
RANK	CITY	STATE	MORT. RATE	RANK	CITY	STATE	MORT. RATE	RANK	CITY	STATE	MORT. RATE
360	PETERSBURG	VA	0.988	444	CRANSTON	RI	0.929	396			
361	MAUMATOSA	WIS	0.987	478	HUTCHINSON	KAN	0.929	151			
362	ENID	OKLA	0.985	361	FORT SMITH	ARK	0.929	10			
363	SANTA BARBARA	CAL	0.984	45	PALO ALTO	CAL	0.928	30			
364	RGANCKE	VA	0.982	447	AUSTIN	TEX	0.926	416			
365	HATTIESBURG	MISS	0.980	234	NORTH LITTLE ROCK	ARK	0.922	13			
366	PINE BLUFF	ARK	0.979	14	HUNTINGTON PARK	CAL	0.921	24			
367	DURHAM	NC	0.979	318	BURBANK	CAL	0.919	20			
368	ITHACA	NY	0.977	295	FARGO	ND	0.919	326			
369	PORTSMOUTH	OHIO	0.977	352	SHAKER HEIGHTS	OHIO	0.919	354			
370	ALLIANCE	OHIO	0.976	329	ROSWELL	NM	0.918	286			
371	FORT DODGE	IOWA	0.976	145	KALAMAZOC	MICH	0.917	217			
372	SAVANNAH	GA	0.976	90	WALTON CITY	IOWA	0.916	147			
373	LAWTON	OKLA	0.974	362	SALINA	KAN	0.915	153			
374	MADISON	WIS	0.973	470	GAOSEN	ALA	0.913	4			
375	COLUMBUS	GA	0.971	86	MAUSAU	WIS	0.912	477			
376	ELKHART	IND	0.971	122	SANTA MONICA	CAL	0.909	46			
377	MARIION	IND	0.971	130	ROME	NY	0.905	307			
378	CHICOPREE	MASS	0.971	181	PARKERSBURG	WV	0.902	461			
379	SPRINGFIELD	MO	0.967	246	SALAM	DRE	0.894	369			
380	NEW KENSINGTON	PENN	0.966	384	SOUTH GATE	CAL	0.894	170			
381	ROYAL OAK	MICH	0.965	223	BANGOR	ME	0.894	144			
382	PHOENIA	CAL	0.964	32	ABILENE	TEX	0.891	393			
383	ERU CLAIRE	WIS	0.963	465	NORRISTOWN	PENN	0.884	253			
384	ATLANTON	MISS	0.963	463	GLENDAL	CAL	0.884	253			
385	ATLANTON	MISS	0.961	258	JACKSON	MISS	0.883	133			
386	LINCOLN	NEB	0.961	258	NEW ALBANY	IND	0.878	135			
387	WATERLOO	NEB	0.958	313	RICHMOND	IND	0.873	104			
388	CLEVELAND HEIGHTS	OHIO	0.957	334	ELGIN	ILL	0.869	410			
389	BLOXT	MISS	0.957	232	JOHNSON CITY	TENN	0.867	254			
390	ALBUQUERQUE	NM	0.957	285	CONCORD	ILL	0.860	106			
391	BERKELEY	CAL	0.957	18	GALLSBURG	ILL	0.855	409			
392	SPOKANE	WASH	0.956	452	MERTON	MISS	0.851	237			
393	WILKINSBURG	PENN	0.954	393	SALT LAKE CITY	UTAH	0.850	436			
394	STOCKTON	CAL	0.954	48	LIBROCK	TEX	0.847	426			
395	DENVER	COLORADO	0.953	51	PHOENIX	OKLA	0.845	364			
396	COLORADO SPRINGS	COLORADO	0.953	50	NORMAN	OKLA	0.843	8			
397	PASADENA	CAL	0.953	31	AMARILLO	TEX	0.842	415			
398	LA CROSSE	WIS	0.953	469	HIGH POINT	NC	0.828	321			
399	UTICA	NY	0.951	311	MARTON	OHIO	0.812	346			
400	LYNCHBURG	VA	0.949	441	CHEYENNE	WY	0.808	480			
401	ST. JOSEPH	MO	0.948	244	RALEIGH	NC	0.801	322			
402	RAPID CITY	SD	0.947	406	GRAND FORKS	ND	0.792	327			
403	NEWARK	OHIO	0.947	349	MIAMI BEACH	FLA	0.790	74			
404	LAUREL	MISS	0.946	236	SALT LAKE CITY	UTAH	0.767	428			
405	ST. PETERSBURG	FLA	0.946	78	PUEBLO	COLO	0.729	196			
406	CHAMPAIGN	ILL	0.945	98	OGDEN	UTAH	0.713	434			
407	PADUCAH	KY	0.945	162	MIDDLETOWN	CONN	0.712	57			
408	ALBANY	GA	0.944	82	TEMPLE	TEX	0.710	430			
409	EL PASO	TEX	0.944	421	PROVO	UTAH	0.613	7			
410	GREAT FALLS	MONT	0.943	250	TUSCALOOSA	ALA	0.605				
411	SANTA ANA	CAL	0.942	44							
412	ST. CLOUD	MINN	0.941	229							
413	TOPEKA	KAN	0.940	154							
414	CHARLOTTE	NC	0.939	317							
415	LAREDO	TEX	0.938	425							
416	FORT WORTH	TEX	0.935	422							
417	BURLINGTON	IOWA	0.933	138							
418	TUCSON	ARIZ	0.933	9							
419	BROWNSVILLE	TEX	0.932	418							

1970					CITIES RANKED BY 1970 MORTALITY RATE-CANCER					CANCER				
MORT. RATE					(37)					MORT. RATE				
RANK	CITY	STATE	PAGE		RANK	CITY	STATE	PAGE		RANK	CITY	STATE	PAGE	
1	NEWBURGH	NY	1-618	301	60	LEXINGTON	KY	1-265	158	60	LEXINGTON	KY	1-265	158
2	WASHINGTON	PENN	1-574	351	61	MUSKEGON	MI	1-266	220	61	MUSKEGON	MI	1-266	220
3	BESSEMER	ALA	1-553	2	62	PITTSBURGH	PENN	1-263	387	62	PITTSBURGH	PENN	1-263	387
4	EASTON	PENN	1-553	375	63	BELOIT	WIS	1-263	464	63	BELOIT	WIS	1-263	464
5	COWINGTON	NY	1-470	375	64	CLEVELAND	OHIO	1-261	333	64	CLEVELAND	OHIO	1-261	333
6	ELMHURST	NY	1-459	253	65	WILKINSBURG	PENN	1-260	393	65	WILKINSBURG	PENN	1-260	393
7	JERKINTOWN	PENN	1-423	373	66	RAYONNE	PENN	1-259	388	66	RAYONNE	PENN	1-259	388
8	WHEELING	WV	1-424	462	67	BELOIT	WIS	1-258	258	67	BELOIT	WIS	1-258	258
9	CHARLESTON	SC	1-398	705	68	BELOIT	WIS	1-258	95	68	BELOIT	WIS	1-258	95
10	EAST ST. LOUIS	ILL	1-377	103	69	AUGUSTA	GA	1-258	85	69	AUGUSTA	GA	1-258	85
11	ITHACA	NY	1-372	295	70	WEST PALM BEACH	FLA	1-257	81	70	WEST PALM BEACH	FLA	1-257	81
12	LACKAWANNA	NY	1-370	298	71	PROVIDENCE	RI	1-255	399	71	PROVIDENCE	RI	1-255	399
13	LACKAWANNA	NY	1-370	310	72	MIAMI	FLA	1-253	73	72	MIAMI	FLA	1-253	73
14	TROY	NY	1-368	310	73	DISTRICT OF COLUMBIA		1-252	66	73	DISTRICT OF COLUMBIA		1-252	66
15	KEY WEST	FLA	1-368	71	74	PERTH AMBOY	NJ	1-249	279	74	PERTH AMBOY	NJ	1-249	279
16	BLOOMINGTON	IND	1-367	120	75	HARTFORD	CONN	1-248	55	75	HARTFORD	CONN	1-248	55
17	LIMA	OHIO	1-366	343	76	SACRAMENTO	CAL	1-248	37	76	SACRAMENTO	CAL	1-248	37
18	NORRISTOWN	PENN	1-363	385	77	MOONSBURG	PA	1-247	401	77	MOONSBURG	PA	1-247	401
19	SAN LEANDRO	CAL	1-359	42	78	LOUISVILLE	KY	1-246	159	78	LOUISVILLE	KY	1-246	159
20	BIRMINGHAM	ALA	1-351	3	79	DULUTH	GA	1-243	226	79	DULUTH	GA	1-243	226
21	LOCKPORT	NY	1-348	299	80	YOUNGSTOWN	OHIO	1-243	359	80	YOUNGSTOWN	OHIO	1-243	359
22	CINCINNATI	OHIO	1-348	332	81	SUPERIOR	WIS	1-243	476	81	SUPERIOR	WIS	1-243	476
23	BAY CITY	MICH	1-348	208	82	ALCONA	PENN	1-242	372	82	ALCONA	PENN	1-242	372
24	NEWPORT	MASS	1-345	160	83	MANFIELD	OHIO	1-242	345	83	MANFIELD	OHIO	1-242	345
25	SOMERVILLE	MASS	1-341	201	84	NEWARK	OHIO	1-241	349	84	NEWARK	OHIO	1-241	349
26	DANVILLE	ILL	1-339	101	85	SANDUSKY	MI	1-241	353	85	SANDUSKY	MI	1-241	353
27	PORTSMOUTH	OHIO	1-334	352	86	ANDERSON	IND	1-240	119	86	ANDERSON	IND	1-240	119
28	HARRISBURG	PENN	1-332	377	87	MCKEESPORT	PENN	1-239	382	87	MCKEESPORT	PENN	1-239	382
29	CHARLESTON	WV	1-329	456	88	EAST CHICAGO	IND	1-238	121	88	EAST CHICAGO	IND	1-238	121
30	HUNTINGTON PARK	CAL	1-323	24	89	BUFFALO	NY	1-238	292	89	BUFFALO	NY	1-238	292
31	ORANGE	NJ	1-321	276	90	DAYTON	OHIO	1-234	337	90	DAYTON	OHIO	1-234	337
32	HAGERSTOWN	MD	1-320	175	91	BARTON	OHIO	1-234	380	91	BARTON	OHIO	1-234	380
33	KEARNY	NJ	1-312	270	92	CLINTON	ILL	1-233	217	92	CLINTON	ILL	1-233	217
34	PETERSBURG	VA	1-310	444	93	CLINTON	ILL	1-233	217	93	CLINTON	ILL	1-233	217
35	NEWPORT	RI	1-308	397	94	ST. LOUIS	MO	1-230	265	94	ST. LOUIS	MO	1-230	265
36	BALTIMORE	MD	1-302	173	95	BLOOMFIELD	CAL	1-228	34	95	BLOOMFIELD	CAL	1-228	34
37	KOKOMO	IND	1-301	128	96	BLOOMFIELD	CAL	1-228	260	96	BLOOMFIELD	CAL	1-228	260
38	MANCHESTER	MASS	1-300	255	97	LAFALETTE	NJ	1-225	129	97	LAFALETTE	NJ	1-225	129
39	WALDEN	MASS	1-300	391	98	PORT ARTHUR	TEX	1-224	427	98	PORT ARTHUR	TEX	1-224	427
40	WALDEN	PENN	1-300	391	99	FERDALE	MI	1-223	211	99	FERDALE	MI	1-223	211
41	KUNSTON	PENN	1-297	297	100	DUBUQUE	IA	1-222	144	100	DUBUQUE	IA	1-222	144
42	NEW KENINGTON	PENN	1-293	381	101	CUMBERLAND	MD	1-221	174	101	CUMBERLAND	MD	1-221	174
43	CAMDEN	LA	1-292	261	102	VALLEY STREAM	NY	1-221	312	102	VALLEY STREAM	NY	1-221	312
44	NEW ORLEANS	LA	1-288	168	103	VANCOUVER	WASH	1-221	454	103	VANCOUVER	WASH	1-221	454
45	VICKSBURG	MISS	1-287	238	104	BREWERTON	MASS	1-219	449	104	BREWERTON	MASS	1-219	449
46	CHATTANOOGA	TENN	1-283	408	105	PAWUCKET	RI	1-218	398	105	PAWUCKET	RI	1-218	398
47	SAVANNAH	GA	1-283	90	106	HOLYOKE	MASS	1-217	187	106	HOLYOKE	MASS	1-217	187
48	GALVESTON	TEX	1-280	423	107	FORT WAYNE	IND	1-217	124	107	FORT WAYNE	IND	1-217	124
49	SCHENECTADY	NY	1-280	308	108	ELKHART	IND	1-217	122	108	ELKHART	IND	1-217	122
50	HORGEN	NJ	1-279	267	109	ERIE	PENN	1-216	376	109	ERIE	PENN	1-216	376
51	NORTH LITTLE ROCK	ARK	1-276	13	110	PHILADELPHIA	PENN	1-216	386	110	PHILADELPHIA	PENN	1-216	386
52	RECONDO BEACH	CAL	1-275	33	111	VALLEJO	CAL	1-215	49	111	VALLEJO	CAL	1-215	49
53	LINDEN	NJ	1-273	271	112	NEW BRUNSWICK	NJ	1-213	274	112	NEW BRUNSWICK	NJ	1-213	274
54	ALBANY	NY	1-272	288	113	COLUMBUS	OHIO	1-212	335	113	COLUMBUS	OHIO	1-212	335
55	PORT HURON	MICH	1-270	222	114	DAYTONA BEACH	FLA	1-212	67	114	DAYTONA BEACH	FLA	1-212	67
56	HACKENSACK	NJ	1-266	266	115	BATTLE CREEK	MICH	1-210	207	115	BATTLE CREEK	MICH	1-210	207
57	CHELSEA	MASS	1-265	180	116	TRENTON	NJ	1-209	281	116	TRENTON	NJ	1-209	281
58	BOSTON	MASS	1-265	177	117	CHARLOTTEVILLE	VA	1-209	439	117	CHARLOTTEVILLE	VA	1-209	439
59	PASSAIC	NJ	1-265	277	118	MAUSAU	WIS	1-207	477	118	MAUSAU	WIS	1-207	477
					119	LINCOLN PARK	MICH	1-207	219	119	LINCOLN PARK	MICH	1-207	219

1970
CANCER
MORT. RATE
(CANCER MORTALITY RATE (CONT.))
(58)

RANK	CITY	STATE	CANCER MORT. RATE	PAGE	(CANCER MORTALITY RATE (CONT.)) (58)	RANK	CITY	STATE	CANCER MORT. RATE	PAGE
120	SYRACUSE	NY	1-206	309		180	YONKERS	NY	1-159	315
121	EUCLID	OHIO	1-205	340		181	LORAIN	OHIO	1-158	344
122	NEWARK	NJ	1-205	273		182	PLAINFIELD	NJ	1-156	280
123	SPARTANBURG	SC	1-205	405		183	SAN JOSE	CAL	1-156	41
124	LANCASTER	PENN	1-202	380		184	OAK PARK	ILL	1-154	112
125	NEW CASTLE	PENN	1-202	383		185	FOIRMONT	IND	1-154	136
126	GARY	IND	1-201	125		186	SPRINGFIELD	WV	1-154	458
127	STUBENVILLE	OHIO	1-200	356		187	LA FAYETTE	LA	1-154	163
128	BROCKTON	MASS	1-199	178		188	FAVETTEVILLE	NC	1-153	319
129	AURORA	ILL	1-199	94		189	BINGHAMTON	NY	1-153	201
130	CHICAGO	ILL	1-199	99		190	DURHAM	NC	1-153	318
131	BELLEVILLE	NJ	1-197	259		191	MEDFORD	MASS	1-152	192
132	COLUMBIA	SC	1-197	403		192	ROCKY MOUNT	NC	1-152	323
133	SALEM	ORE	1-195	369		193	ALAMEDA	CAL	1-151	15
134	ELIZABETH	NJ	1-194	264		194	RICHMOND	VA	1-150	446
135	ZANESVILLE	OHIO	1-193	360		195	HAFLITCN	CHIO	1-147	341
136	JACKSON	MICH	1-192	216		196	BEAUMONT	TEX	1-146	417
137	CANTON	OHIO	1-186	331		197	ROCHESTER	NY	1-146	306
138	YAKIMA	WASH	1-185	455		198	SPRINGFIELD	OHIO	1-144	355
139	WILLIAMSPORT	PENN	1-184	394		199	GRANITE CITY	ILL	1-143	107
140	WHITE PLAINS	NY	1-184	314		200	TERRE HAUTE	IND	1-143	137
141	ELYRIA	OHIO	1-181	339		201	NEW HAVEN	CONN	1-142	59
142	SAGINAW	MICH	1-181	224		202	ST. JOSEPH	MO	1-141	244
143	ATLANTIC CITY	NJ	1-180	257		203	BURLINGTON	VT	1-140	437
144	PORTLAND	ME	1-179	172		204	RACINE	WIS	1-140	474
145	MUNCIE	IND	1-178	133		205	REVERE	MASS	1-139	199
146	MORILE	ALA	1-177	5		206	NEW ALBANY	IND	1-139	134
147	NASHUA	NH	1-177	256		207	FORT LAUDERDALE	FLA	1-138	68
148	TOLEDO	OHIO	1-176	357		208	UNION CITY	NJ	1-138	282
149	MISHAWAKA	IND	1-176	132		209	NEW BEDFORD	MASS	1-138	194
150	BUTTE	MONT	1-175	249		210	HOLSTON	TEX	1-137	424
151	QUINCY	ILL	1-173	114		211	PATTERSON	NJ	1-137	278
152	PORTSMOUTH	VA	1-173	445		212	FALL RIVER	MASS	1-135	183
153	GREENVILLE	MISS	1-172	233		213	CIGERO	ILL	1-134	100
154	LAURENCE	MASS	1-172	188		214	SAN MATEO	CAL	1-134	43
155	JERSEY CITY	NJ	1-172	269		215	PEORIA	ILL	1-134	113
156	SALEM	MASS	1-171	200		216	CLIFTON	NJ	1-134	262
157	BAKERSFIELD	CAL	1-170	17		217	MONGE	LA	1-133	167
158	LEWISTON	ME	1-169	171		218	ALEXANDRIA	LA	1-132	163
159	DETROIT	MICH	1-168	210		219	ROCK ISLAND	ILL	1-132	116
160	CHICAGO	PENN	1-168	374		220	WALTHAM	MASS	1-132	204
161	WASHINGTON	NC	1-167	253		221	GAINSVILLE	FLA	1-131	69
162	TACOMA	WASH	1-167	443		222	ORLANDO	FLA	1-131	75
163	NORFOLK	VA	1-166	358		223	KANSAS CITY	KAN	1-130	152
164	WARREN	OHIO	1-166	40		224	CLARKSBURG	WV	1-130	457
165	SAN FRANCISCO	CAL	1-166	40		225	GRAND RAPIDS	MICH	1-130	213
166	LOWELL	MASS	1-165	189		226	CLINTON	TOWNA	1-129	140
167	NEW YORK CITY	NY	1-164	313		227	BEVERLY HILLS	CAL	1-129	19
168	WATERTOWN	NY	1-164	202		228	IRVINGTON	NJ	1-128	268
169	SPRINGFIELD	MASS	1-164	202		229	SHARON	PENN	1-127	350
170	PENSACOLA	FLA	1-164	77		230	PHOENIX	ARIZ	1-127	221
171	WATERBURY	CT	1-164	64		231	LITTLE ROCK	ARK	1-127	12
172	NORWICK	RI	1-163	400		232	TUCSON	ARIZ	1-127	12
173	NORWOOD	OHIO	1-162	350		233	RICHMOND	IND	1-126	136
174	GARFIELD	NJ	1-162	265		234	JACKSONVILLE	FLA	1-126	71
175	KANKAKEE	ILL	1-162	109		235	BOISE	IDA	1-126	91
176	ANNISTON	ALA	1-162	1		236	MEMPHIS	TENN	1-126	412
177	BRIDGEPORT	CONN	1-161	53		237	FITCHBURG	MASS	1-124	184
178	PADUCAH	KY	1-159	162		238	LEBANON	PENN	1-123	381
179	SPRINGFIELD	ILL	1-159	117		239	NEWPORT NEWS	VA	1-121	442

CANCER MORT. RATE		STATE		CITY		RANK		CITY		STATE		CANCER MORT. RATE		PAGE	
1970		CANCER MORT. RATE		STATE		RANK		CITY		STATE		1970		CANCER MORT. RATE	
240	EVANSVILLE	IND	1-121	123	300	MINNEAPOLIS	MINN	1-079	227	INDIANAPOLIS	IND	1-121	123	300	MINNEAPOLIS
241	WEST FELS	WIS	1-120	478	301	INDIANAPOLIS	IND	1-079	227	INDIANAPOLIS	IND	1-120	478	301	INDIANAPOLIS
242	WILKES-BA	WIS	1-119	479	302	SAN BERNARDINO	CAL	1-078	38	SAN BERNARDINO	CAL	1-119	479	302	SAN BERNARDINO
243	WILKES-BA	WIS	1-118	480	303	QUINCY	ILL	1-077	198	QUINCY	ILL	1-118	480	303	QUINCY
244	RICHMOND	CAL	1-117	481	304	BRISTOL	CONN	1-076	54	BRISTOL	CONN	1-117	481	304	BRISTOL
245	STOCKTON	CAL	1-116	482	305	OTTUMWA	IOWA	1-075	148	OTTUMWA	IOWA	1-116	482	305	OTTUMWA
246	ALBUQUERQUE	NM	1-115	483	306	WORCESTER	MASS	1-074	205	WORCESTER	MASS	1-115	483	306	WORCESTER
247	ROANKE	VA	1-114	484	307	OAKLAND	CAL	1-073	29	OAKLAND	CAL	1-114	484	307	OAKLAND
248	COUNCIL BLUFFS	IOWA	1-113	485	308	HOT SPRINGS	ARK	1-072	11	HOT SPRINGS	ARK	1-113	485	308	HOT SPRINGS
249	ROME	GA	1-112	486	309	BILOXI	MISS	1-071	232	BILOXI	MISS	1-112	486	309	BILOXI
250	MONTGOMERY	ALA	1-111	487	310	DECATUR	GA	1-070	233	DECATUR	GA	1-111	487	310	DECATUR
251	GADSDEN	ALA	1-110	488	311	PARMA	OHIO	1-069	102	PARMA	OHIO	1-110	488	311	PARMA
252	BERWYN	ILL	1-109	489	312	KANSAS CITY	MO	1-068	243	KANSAS CITY	MO	1-109	489	312	KANSAS CITY
253	MERIDEN	CONN	1-108	490	313	GLoucester	MASS	1-067	185	GLoucester	MASS	1-108	490	313	GLoucester
254	PINE BLUFF	ARK	1-107	491	314	CORPUS CHRISTI	TEX	1-066	419	CORPUS CHRISTI	TEX	1-107	491	314	CORPUS CHRISTI
255	SCRANTON	PENN	1-106	492	315	SEATTLE	WASH	1-065	451	SEATTLE	WASH	1-106	492	315	SEATTLE
256	MUSKOGEE	OKLA	1-105	493	316	ROCKFORD	ILL	1-064	334	ROCKFORD	ILL	1-105	493	316	ROCKFORD
257	LAKEWOOD	OHIO	1-104	494	317	CLEVELAND HEIGHTS	OHIO	1-063	108	CLEVELAND HEIGHTS	OHIO	1-104	494	317	CLEVELAND HEIGHTS
258	PARKERSBURG	WV	1-103	495	318	JOLIET	ILL	1-062	315	JOLIET	ILL	1-103	495	318	JOLIET
259	MASON CITY	IOWA	1-102	496	319	TALLAHASSEE	FLA	1-061	79	TALLAHASSEE	FLA	1-102	496	319	TALLAHASSEE
260	CHAMPAIGN	ILL	1-101	497	320	WINSTON-SALEM	NC	1-060	325	WINSTON-SALEM	NC	1-101	497	320	WINSTON-SALEM
261	SHREVEPORT	LA	1-100	498	321	EAU CLAIRE	WIS	1-059	465	EAU CLAIRE	WIS	1-100	498	321	EAU CLAIRE
262	MOLINE	ILL	1-099	499	322	BETHLEHEM	PENN	1-058	373	BETHLEHEM	PENN	1-099	499	322	BETHLEHEM
263	MICHITA	KAN	1-098	500	323	SPOKANE	WASH	1-057	452	SPOKANE	WASH	1-098	500	323	SPOKANE
264	SIoux CITY	IOWA	1-097	501	324	CUYAHOGA FALLS	OHIO	1-056	336	CUYAHOGA FALLS	OHIO	1-097	501	324	CUYAHOGA FALLS
265	BURBANK	CAL	1-096	502	325	ASHEVILLE	NC	1-055	316	ASHEVILLE	NC	1-096	502	325	ASHEVILLE
266	NIAGARA FALLS	NY	1-095	503	326	HIGHLAND PARK	MICH	1-054	215	HIGHLAND PARK	MICH	1-095	503	326	HIGHLAND PARK
267	HAVERHILL	MASS	1-094	504	327	CHARLOTTE	NC	1-053	317	CHARLOTTE	NC	1-094	504	327	CHARLOTTE
268	ALBUQUERQUE	NM	1-093	505	328	WACO	TEX	1-052	432	WACO	TEX	1-093	505	328	WACO
269	WILKES-BA	PENN	1-092	506	329	KNOXVILLE	TENN	1-051	411	KNOXVILLE	TENN	1-092	506	329	KNOXVILLE
270	WILKES-BA	PENN	1-091	507	330	GREENVILLE	SC	1-050	404	GREENVILLE	SC	1-091	507	330	GREENVILLE
271	OMAHA	NEB	1-090	508	331	LOS ANGELES	CAL	1-049	250	LOS ANGELES	CAL	1-090	508	331	LOS ANGELES
272	MOUNT VERNON	NY	1-089	509	332	KALAMAZOO	MICH	1-048	230	KALAMAZOO	MICH	1-089	509	332	KALAMAZOO
273	SHEBOYGAN	WIS	1-088	510	333	MACON	GA	1-047	197	MACON	GA	1-088	510	333	MACON
274	HAMTRAC	MICH	1-087	511	334	JOPLIN	MO	1-046	166	JOPLIN	MO	1-087	511	334	JOPLIN
275	TAMPA	FLA	1-086	512	335	CECIL RAPIDS	IOWA	1-045	407	CECIL RAPIDS	IOWA	1-086	512	335	CECIL RAPIDS
276	NEW ROCHELLE	NM	1-085	513	336	CECIL RAPIDS	IOWA	1-044	407	CECIL RAPIDS	IOWA	1-085	513	336	CECIL RAPIDS
277	NEW ROCHELLE	NM	1-084	514	337	CECIL RAPIDS	IOWA	1-043	348	CECIL RAPIDS	IOWA	1-084	514	337	CECIL RAPIDS
278	NEW BRITAIN	CONN	1-083	515	338	TULSA	OKLA	1-042	230	TULSA	OKLA	1-083	515	338	TULSA
279	BEVERLY	MASS	1-082	516	339	DALLAS	TEX	1-041	250	DALLAS	TEX	1-082	516	339	DALLAS
280	FLINT	MICH	1-081	517	340	GREAT FALLS	MONT	1-040	250	GREAT FALLS	MONT	1-081	517	340	GREAT FALLS
281	EVERETT	WASH	1-080	518	341	ST. PAUL	MINN	1-039	396	ST. PAUL	MINN	1-080	518	341	ST. PAUL
282	HUNTINGTON	WV	1-079	519	342	CHICPEE	MASS	1-038	236	CHICPEE	MASS	1-079	519	342	CHICPEE
283	FORT WORTH	TEX	1-078	520	343	ALLEN TOWN	PENN	1-037	236	ALLEN TOWN	PENN	1-078	520	343	ALLEN TOWN
284	RENO	NEV	1-077	521	344	PITTSFIELD	MASS	1-036	480	PITTSFIELD	MASS	1-077	521	344	PITTSFIELD
285	BATON ROUGE	LA	1-076	522	345	LAKE CHARLES	LA	1-035	493	LAKE CHARLES	LA	1-076	522	345	LAKE CHARLES
286	OKLAHOMA CITY	OKLA	1-075	523	346	GREEN BAY	WIS	1-034	251	GREEN BAY	WIS	1-075	523	346	GREEN BAY
287	MASSILLON	OHIO	1-074	524	347	LYNCHBURG	VA	1-033	286	LYNCHBURG	VA	1-074	524	347	LYNCHBURG
288	PORTLAND	ORE	1-073	525	348	SIoux FALLS	SD	1-032	286	SIoux FALLS	SD	1-073	525	348	SIoux FALLS
289	DEARBORN	MICH	1-072	526	349	MIDDLE TOWN	OHIO	1-031	468	MIDDLE TOWN	OHIO	1-072	526	349	MIDDLE TOWN
290	DES MOINES	IOWA	1-071	527	350	CRANSTON	RI	1-030	286	CRANSTON	RI	1-071	527	350	CRANSTON
291	SOUTH GATE	CAL	1-070	528	351	PHOENIX	ARIZ	1-029	62	PHOENIX	ARIZ	1-070	528	351	PHOENIX
292	EUGENE	ORE	1-069	529	352	LAUREL	MISS	1-028	228	LAUREL	MISS	1-069	529	352	LAUREL
293	FORT DODGE	IOWA	1-068	530	353	CHEYENNE	WY	1-027	228	CHEYENNE	WY	1-068	530	353	CHEYENNE
294	DAVENPORT	IOWA	1-067	531	354	ALTON	ILL	1-026	228	ALTON	ILL	1-067	531	354	ALTON
295	ANN ARBOR	MICH	1-066	532	355	LINCOLN	NEB	1-025	228	LINCOLN	NEB	1-066	532	355	LINCOLN
296	AKRON	OHIO	1-065	533	356	KENOSHA	WIS	1-024	228	KENOSHA	WIS	1-065	533	356	KENOSHA
297	FORT SMITH	ARK	1-064	534	357	ROSWELL	NM	1-023	228	ROSWELL	NM	1-064	534	357	ROSWELL
298	LYNN	MASS	1-063	535	358	STAMFORD	CONN	1-022	228	STAMFORD	CONN	1-063	535	358	STAMFORD
299	LAKELAND	FLA	1-062	536	359	ROCHESTER	MINN	1-021	228	ROCHESTER	MINN	1-062	536	359	ROCHESTER

1970
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(CANCER MORTALITY RATE CONT.)
(100)

RANK	CITY	STATE	CANCER MORT. RATE	CITY	STATE	CANCER MORT. RATE
360	TAUNTON	MASS	1.027	203	MISS	0.964
361	WEST NEW YORK	NJ	1.027	283	CAL	0.964
362	AMSTERDAM	NY	1.027	289	MASS	0.963
363	SAN ANTONIO	TEX	1.026	429	ILL	0.963
364	OSHKOSH	WIS	1.026	473	TENN	0.963
365	HAMMOND	IND	1.026	126	OHIO	0.961
366	MICHIGAN CITY	IND	1.026	131	CONN	0.960
367	ROYAL OAK	MICH	1.025	223	ME	0.959
368	GALESBURG	ILL	1.025	106	CONN	0.952
369	CONCORD	NH	1.025	234	OHIO	0.952
370	MANITOWOC	WIS	1.024	471	TEX	0.951
371	LA ROSSE	WIS	1.024	294	CAL	0.951
372	LONG BEACH	CAL	1.024	469	MASS	0.950
373	POMONA	CAL	1.020	32	OKLA	0.949
374	SANTA FE	NM	1.019	287	WIS	0.943
375	TYLER	TEX	1.018	431	VA	0.942
376	ASHLAND	KY	1.016	436	DENVER	0.942
377	MONTCLAIR	NJ	1.015	156	COLO	0.942
378	MORGANTOWN	WV	1.015	272	TENN	0.941
379	ROME	NY	1.014	460	TEX	0.938
380	LANSING	MICH	1.014	307	OKLA	0.938
381	GREENSBORO	NC	1.012	218	KAN	0.938
382	ALBANY	GA	1.011	82	TEX	0.937
383	NUTLEY	NJ	1.010	275	ILL	0.936
384	NASHVILLE	TENN	1.010	413	MONT	0.935
385	HUTCHINSON	KAN	1.007	151	GA	0.934
386	INGLEWOOD	CAL	1.006	25	TEX	0.934
387	COLUMBUS	GA	1.005	86	SD	0.931
388	MERIDIAN	MISS	1.005	237	PENN	0.931
389	KALINA	KAN	1.005	153	WIS	0.929
390	ST. PETERSBURG	FLA	1.004	78	CAL	0.925
391	JEFFERSON CITY	MO	1.003	241	GA	0.924
392	UNIVERSITY CITY	MO	1.001	247	NY	0.918
393	WYANDOTTE	MICH	1.000	225	ILL	0.917
394	SAN DIEGO	CAL	0.999	39	MINN	0.912
395	COLUMBIA	MO	0.997	239	COLO	0.906
396	RALEIGH	NC	0.993	322	CONN	0.903
397	DWENSBORO	KY	0.992	161	FLA	0.901
398	WATERLOO	IOWA	0.992	150	WIS	0.887
399	SANTA ANA	CAL	0.992	44	CAL	0.878
400	ALHAMBRA	TEX	0.991	16	IND	0.874
401	LAREDO	TEX	0.991	425	MASS	0.871
402	IOWA CITY	IOWA	0.990	146	NJ	0.861
403	RIVERSIDE	CAL	0.989	36	UTAH	0.853
404	WAUKESHA	ILL	0.987	118	ALA	0.850
405	EVERETT	MASS	0.987	182	UTAH	0.848
406	GRAND FORKS	ND	0.985	327	MINN	0.831
407	HIGH POINT	NC	0.984	321	WIS	0.824
408	BURLINGTON	IOWA	0.984	138	WIS	0.824
409	SANTA MONICA	CA	0.981	246	WIS	0.824
410	FARGO	ND	0.981	46	WIS	0.824
411	WICHITA FALLS	TEX	0.981	326	WIS	0.824
412	WICHITA	TEX	0.979	433	WIS	0.824
413	INDEPENDENCE	MO	0.976	235	WIS	0.824
414	WINDYBROOK	WIS	0.973	470	WIS	0.824
415	POCAHONTO	WIS	0.973	95	WIS	0.824
416	POCAHONTO	WIS	0.967	45	WIS	0.824
417	SANTA BARBARA	CAL	0.967	45	WIS	0.824
418	AMARILLO	TEX	0.966	415	WIS	0.824
419	ALLIANCE	OHIO	0.965	329	WIS	0.824

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